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How prior life experiences influence teaching : multiple case studies of mature age elementary student teachers.

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HOW PRIOR LIFE EXPERIENCES INFLUENCE TEACHING: MULTIPLE CASE STUDIES OF MATURE AGE ELEMENTARY STUDENT TEACHERS

A Dissertation Presented

By

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DEDICATION

This thesis can only be dedicated to one person, my husband, without whose unflagging support in a thousand ways this could never have happened.

His expertise with computers saved me dozens of times.

His expertise in the kitchen allowed me to continue working right up until meal times.

His past experience of doing his own doctoral dissertation provided a basis of understanding.

His love provided support and encouragement.

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ABSTRACT

HOW PRIOR LIFE EXPERIENCES INFLUENCE TEACHING: MULTIPLE CASE STUDIES OF MATURE-AGED STUDENT TEACHERS

MAY 2005

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Researchers say that what really differentiates mature age students is not age as much as it is life experiences. How and in what ways does that influence the preparation of pre-service teachers? What happens in the classroom is more related to the teacher than any other variable. All, and especially older student teachers, bring rich experiences and images into the classroom that affect their attitudes, approach, and decision-making. The overall purpose of this research was to learn how life experiences of mature age student teachers influence their learning to teach children in an elementary classroom.

Participants are five students between the ages of 38 and 45, who did their student teaching practicum within a traditional teacher preparation program. Data was gathered from three in-depth interviews, three classroom observations with field notes and video tapes, and from selected documents. The Rainbow of Life Roles (Super, 1980) was used to supplement interviews about the life experiences of each participant. Stimulated Recall (Bloom, 1953 and others) was used to discover what past experiences influenced decision making and problem solving. Interview questions focused on participants'

interpretation of their life experiences, their perspectives of themselves as learners, workers, and parents, and their ideas about teaching.

Based on the data, the following conclusions were reached:

(1) Life experiences, from activities such as other jobs, parenting, travel, reading, coaching, and community work were embedded in the perspectives of the emerging teacher serving as a lens or filter through which decisions were made in the classroom.

(2) Life experiences provided connections to build upon or barriers to be reconstructed. Examination of prior experiences and beliefs will help to reconstruct these experiences into meaningful ideas about teaching that will be more than an overlay experience that may be washed out in the early rigors of learning to teach. Implications for teacher education include the need for promotion of the examination of prior life experiences to integrate self-knowledge with theory and practice and to remove possible barriers to the development of solid teaching practices.

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INTRODUCTION

"Lessons from the past and first hand experience model the future."
-M.A. Riner-

Background

Historical Perspective

In 1939, a book was published that was written by Charles A. Harper. It was called *A Century of Public Teacher Education.* The centennial event that Harper was referring to was the establishment of the first state-supported Normal School, opened on July 3, 1839, in Lexington, Massachusetts with a class of three young ladies. By 1875 normal schools had opened in twenty-five states, serving over 23,000 students. This "growth went hand in hand with provisions for compulsory education of the nation's children, with organization of schools into graded systems, with the growth of state school funds and local taxation for schools, with the rapid growth of public high schools, and with the rise of supervision of schools in states, counties, and cities" (Harper, p. 72). It would be another 25 years (1965) after publication of this book, before the advent of federal funding and national supervision (National Center for Educational Statistics, 2003).

The 65 years following Harper's book have seen many additional changes in education paralleling the changing cultural and social landscape. Most recently are the reforms aimed at teachers. These reforms recognize the importance of the teacher and the nature of the school environments. The recruitment, preparation, licensure, and renewal of a competent teaching force are widely recognized as central issues in the

improvement of schools. Some state policies now require master's degrees for teachers before they can receive full, regular certification. Also increasing the number of master's degree students are mid-career entrants who already have bachelor's degrees and are attracted by master's level teacher preparation programs (Darling-Hammond, Hudson, and Kirby, 1989).

At roughly the same time that normal schools began appearing all over the country, educators were taking notice of how to change existing practices. James Johonnot (1878, p. 51) observed that "Teachers have been content to follow the methods in which they themselves were taught...." That premise, which permeated the world of educators, was reinforced by Lortie (1975), and continues to be a challenge today, one hundred and twenty some years later. It is not surprising then that prior beliefs and life experiences can be seen as troubling or obstructive to effective teacher preparation.

Current Trends in Teacher Education

The Handbook of Research on Teacher Education (Sikula, ed.1996) says, "There are 500,000 pre-service teachers at 1,200 public and private institutions of higher education, not to mention the alternative and internship models that account for another 2,000 to 3,000 neophytes" (National Center for Education Statistics, 1993, as cited by Schwartz 1996, p. 5).

This is a time of great challenge for those preparing to be teachers and for those who prepare them. Education is a hot issue. Politicians and businessmen, as well as parents, are demanding accountability from educators. To this end, more rigorous tests have been developed for both students and teachers. The purpose is to improve public

education. It seems that everyone would like to see excellent schools, but the means to that end are controversial.

School reforms that we are experiencing today were ignited by the 1983 controversial report of the National Commission on Excellence in Education, *A Nation at Risk*. This report, and many others that followed, focused on "perceptions of declining student achievement in an era requiring greater levels of educational success for all students." (Darling-Hammond & Cobb, 1996).

Currently the pressure is being raised for teacher educators to be better prepared than ever before. As long as public education is supported by public funds, many powerful voices will express opinions about teaching and teacher education, as well as schooling. Policymakers have used isolated research studies to mandate program elements, despite objections from the research community. It is good that research can affect public policy, but it also shows that research can be used improperly. Teacher education is complex, difficult to study, and in need of codification and professional standards (Schwartz, 1996).

There is a growing consensus about moving the profession of teaching toward a more common knowledge base. But there is much less consensus about the specific direction that this effort should take. (Sikula et al, 1996). Perhaps this present research can help to shed some light upon that direction for mature aged students who are seeking certification.

One of the responses to the real and perceived shortages of qualified teachers is the evolution of Alternative Certification Programs. These programs offer the opportunity for individuals to teach without graduating from a traditional teacher-preparation

program, but do include a degree in education, supervised internships, and acceptable scores on tests of basic skills and pedagogy. It is estimated that at least 125,000 people, over the years, have been certified through these programs. Guyton, Fox, & Sisk (1991), in their comparison of 23 alternatively certified beginning teachers with 26 teachers from traditional programs, found greater commitment to the teaching profession in traditionally trained teachers. The present research focuses upon these traditionally trained teachers who are nontraditionally aged, in the case of this research, above the age of thirty-five.

Teacher Education in Massachusetts

What happened in Massachusetts in teacher education is consistent with trends in other states. In 1993 the Massachusetts Education and Reform Act was passed. The purpose was to provide a comprehensive plan for strengthening public education. Statewide standards were developed along with the measures for determining if they were met. The intent was to raise higher expectations for all teachers, new and veteran. It became a requirement for all teachers to pass a test of Communication and Literacy Skills and also a test of the appropriate subject matter knowledge. Called The Massachusetts Tests for Educator Licensure (MTEL), all candidates were required to take these tests and to meet the qualifying scores beginning in 1998. There are currently three levels of licensing: (1) Provisional, (2) Initial, and (3) Professional. The Professional license is awarded upon completion of a clinical master's degree or approved equivalent. Licenses must be renewed every five years (Massachusetts Test for Educational Licensure, 2003).

MTEL Test objectives are closely aligned with the Massachusetts Curriculum

Frameworks. The goal is to provide a sequential, consistent, and comprehensive guide for educators to develop curriculum. The frameworks are also used to frame the content of teacher preparation courses in Massachusetts' colleges and universities.

The Problem and Significance

For decades now, promising women, who would have become teachers half a century ago, have been attracted into other careers, which were formerly the primary domain of men. One of the greatest challenges of teacher education in recent years has been how to attract the "best and the brightest" into teacher education and then how to retain them. A new pool of talent has been emerging over the last couple of decades, since adult education has become more prominent and better funded. That new talent may be found in the increase in numbers of mature aged students.

By 1995 the percentage of students in higher education, over age 25, was 55%, compared to 45% under the age of 25 (National Center for Educational Statistics). As a group these mature aged teachers promise much to the profession, bringing to the classrooms their "other" job and life experiences. These older students, often called nontraditional, are found to be conscientious about their work and more focused on their goals. They attend classes regularly and get better grades than other segments of the college student population (Carney-Crompton, 2002; Eifler & Pothoff, 1998; Justice & Dornan, 2001). On average, they enjoy going to classes and doing homework more than younger students (Dill & Henley, 1998). Melichar (1994) reports that the 400 college instructors she surveyed were overwhelmingly more positive toward these older nontraditional students than traditional students. They cited their ability to concentrate,

sound reasoning and listening skills, eagerness to learn, initiative, and time management. Nontraditional students, compared to other students, report significantly less academic stress, greater satisfaction in the school domain, and experience significantly fewer negative health problems (Jacobi, 1987). Novak and Thacker (1991) reported that 68% of the participants in their study of nontraditional students felt above average satisfaction in the student role, although 85% felt strained due to time and multiple role demands.

There are a growing number of mature aged students who have become interested in becoming teachers. They may have other jobs. They may have families. They may be financially responsible for others as well as themselves. These are the people that this research focuses upon. Much of the research of nontraditional teacher education students consists of comparisons of traditional with nontraditional students (DeBlois, 1993; Monthei, 1991; Powell, 1992; Rodriguez & Sjostrom, 1998). Many of these studies concluded that while there were many similarities between the two groups, there were significant differences.

Eifler's (1997) doctoral dissertation focused upon three case studies of elementary nontraditional pre-service teachers who are career changers. Eifler found that her participants demonstrated perseverance, flexibility, self-doubt, and ability to draw upon life experiences. This study, like Eifler's, focuses only upon the mature age students, but the focus is to find out more about how those added years of life and job experiences influence their learning to teach children in an elementary classroom. Is their greater age a hindrance because they are further removed in age than their students or is their greater maturity an advantage because of their life experiences? Or is age not even

a salient factor in teacher education? If age is an important factor, why; and how should that influence teacher preparation?

Statement of the Problem

In their review of the literature of nontraditional students Eifler & Potthoff (1998) conclude that what really differentiates mature age students is not age as much as it is life and job experiences. Knowing how life experiences influence training may help us to better understand how to prepare mature age students for teaching and how to recruit and retain them and, most importantly, how to capitalize upon those life experiences to enrich classrooms for students. The overall purpose of this research is to learn how life and job experiences of mature age pre-service teachers influence their learning to teach children in an elementary classroom.

I chose to work with pre-service teachers because I wanted to catch them at the beginning of their teaching. I wanted to learn what life experiences they bring to teaching. In later years, after they have been teaching, it will be more difficult to separate out what they brought to teaching and what they learned on the job working with colleagues and other resources. What do they bring to the classroom? Would that information assist us in understanding and, thus, to better prepare these nontraditional students to become teachers?

It is the plan of the researcher to capture some of the complexity of the individual in each case. It is understood that people are a synthesis of many components: personality, attitudes, aptitudes, self-concepts, intelligence, sociability, socio-economic status, as well as the physical representation of biology or genes. Chronological age and developmental stage along with social and cultural expectations also figure into this

complexity. One study cannot hope to capture all of the many facets of even one single life. So the focus will be narrowed, even though the complexity is still there, to the life experiences that pre-service teachers, who are age 30 or beyond, bring to elementary classrooms. The point of departure is to find out first, within the confines of limited time and resources, just what, in each instance, are those life and career experiences that feed into their preparation? How are they manifested? Common sense tells us they must be enriching. But are there concomitant problems, as well, and what are they? In what ways do job experiences enrich teaching or make it easier? In what ways do they make it more difficult? How do family responsibilities impact preparation? How do other aspects of life, besides family and jobs, influence learning to teach?

The Study and Its Significance

Purpose of the Study

In a synthesis of the literature on nontraditional students, researchers say that what really differentiates mature age students is not age but the many life and job experiences that they have had (Eifler & Potthoff, 1998). What we don't know is how and in what ways that experience influences teacher preparation. So the overall purpose of this research is to learn how life and job experiences of mature age pre-service teachers are manifested in the classroom. The primary research question is: *How do the life and job experiences of mature age students influence their learning to teach children in an elementary classroom?* Secondary questions relate to the larger issue of teacher education: *How can teacher educators better utilize an individual's life experiences to*

enrich teacher education for all students? Should their classes and student teaching differ from traditional offerings? How?

Significance of the Study

This study will be of interest to teacher educators, especially those who have mature-aged students in their classrooms and under their supervision. It is the hope of this researcher that this study sheds light upon how to use their life experiences to enrich classrooms, for their classmates and for the students that they will teach.

Understanding the way teachers think, act, feel, and intend, how their knowledge develops over time and how it is facilitated in the classroom will, it is hoped, enable educators and researchers to collaboratively evolve mutually agreeable approaches to classroom change and educational improvement which will result in more intrinsic reform than that which is pushed down from above. Any understanding of teaching will be severely limited if it does not incorporate an understanding of how teachers themselves make sense of what they do, how they evaluate their own teaching and make decisions, and why they choose to act in particular ways. What they do depends a great deal on what they think, and what they think is more clearly seen through the lens of their life's experiences. And finally what we know serves as a lens through which we interpret new experiences such as learning to teach.

Schon (1983, 1987) was influential in encouraging teachers to reflect upon their practice. His general argument has been that professional expertise and thinking does not depend on the application of general theoretical knowledge to particular cases, a defining traditional characteristic of professionalism. Instead, he suggests, professional expertise

must depend in very large measure on experience-based knowledge and on non-logical kinds of thinking about what is appropriate in context. Yet little is known about how that experienced-based knowledge plays out in the classroom.

Delimitations

Participants were chosen for this study based upon their status as nontraditional or mature age students of at least thirty years of age with little or no classroom experience, who are enrolled in teacher certification programs at the baccalaureate or post-baccalaureate level and, who are doing their semester-long pre-service or student teaching practicum within a traditional teacher preparation program at the time of this research. I have chosen thirty years of age rather than the more common statistical cutoff age of twenty-five because I feel that those additional years will be important to the accrual of life experiences, upon which this research is dependent.

Limitations and Assumptions

To maximize the productivity of the time available for research, participants were chosen from two colleges within 25 miles of my home. One is a state college, founded almost 150 years ago in 1854, as a normal school, with the mission to prepare new teachers. It evolved into a state college with an enrollment of over 8000 students taking courses in over thirty majors. Over 700 students in 2001 declared education as their major. This college has a long and prominent role in teacher education.

The other college is a private college, founded in 1947, as a direct response to needs and aspirations of local soldiers returning from World War II. It evolved into a

college of over 2000 students taking courses in 35 majors. Education students must declare a major in science or liberal arts with education as a minor. This college has a rapidly growing education department.

Although I have been a 'college supervisor' of students doing their student teaching for several years, none of the research participants are my students nor did I supervise them, because I do not wish to confuse the role of supervisor with that of researcher.

CHAPTER 2

LITERATURE REVIEW

"In the press to equip teachers with the technical knowledge and skills that will be required of them to be successful, it is easy to lose sight of the fact that who the teacher is as a person and chooses to become will influence what happens in the classroom."
Frances Schoonmaker

Introduction

Middle-aged adults, herein defined as over the age of 30, are returning to higher education classrooms to become certified teachers in steadily increasing numbers. Often they have classes with traditionally aged students who are in their late teens and early twenties. These mature students are at a different place developmentally from their younger classmates. They have had more life experiences. They have often had jobs. Many have families and have raised children. They are no longer dependent upon their parents financially. Often they have the financial burden of caring for others. They have more responsibilities and they tend to be more focused on exactly what they want and do not want. They do not want to waste time or money (Klausewitz, 2002).

Are the instructional needs of these mature students the same as for younger students? What do we know about the experience of entering the field of teaching, not upon graduation from college, but in middle adulthood, after experiencing other jobs, and maybe after rearing a family? What is it like for older students to enter university classes with traditionally aged students who are also hoping to obtain their certification and begin teaching? Should their classes differ from traditional offerings and, if so, how?

Most importantly, how do these job and life experiences influence their teacher preparation?

Methodological Approach to the Literature Review

There is very little research that exactly matches this topic. There is a very large body of research on related topics such as teacher education, nontraditional students, and adult learners, so these provided a place to begin. In order to better frame my understanding I began with adult development. Then I moved on to adult learning and nontraditional students, including alternative certification programs and mentoring mature aged students. I reviewed all of the articles that I found that directly relate to middle-aged adults entering the field of teaching.

And finally I searched for research on bringing life experiences into teaching as well as the usefulness of autobiographical narratives. In the process of this review, I have made side forays into feminist literature, education and spirituality, connecting theory and practice, and how we make meaning from our life experiences. This review does not pretend to be an exhaustive review of each of these fields or even of any one of them, but rather a look at all of them as they relate to the little researched topic of life experiences of middle-aged adults and how those experiences affect their learning to teach.

Adult Development

The study of adult development is a twentieth-century phenomenon. Little interest in the early and middle-adult years was demonstrated until the 1970s (Rogers, 1986). In the mid-nineteenth century half of all people died by age 40, but in 1984 Batten stated that "half of all the people on earth who ever lived past the age of 65 are alive today" (cited in Rogers, p. 7). People living today have many more years to live out their adulthood. There has been interest in researching adolescence, young

adulthood, and old age. The middle years are the least studied of the adult stages (Rogers, 1986).

Carl Jung (1875-1961), considered by some to be the father of the modern-day study of adult development, was one of the first theorists to emphasize the second half of life. He believed that older people need to find meaning in their lives. He names as "individuation" the time when an adult becomes uniquely individual and pursues his own aims. Jung divides adulthood into two segments, early and late with the age of forty as the transition time. Others make 35 the transition. Conventionally the adult years are divided into young adulthood [the 20s and 30s], middle adulthood [the 40s and 50s], and later adulthood [age 60 or 65 and up] (Craig & Baucum, 2002).

Because of individual differences it is difficult to categorize the stages solely upon the basis of age; therefore researchers devised the concept of the *age clock* (Neugarten, 1968). Age clocks are a form of socially internalized timing, letting us know if we are progressing through life too quickly or too slowly compared to our peers (Craig & Baucum, 2002). For example, a 35-year-old, still in college, might be considered to be lagging behind the 35-year-old who is thinking about retirement. If these events occur earlier or later than expected, these individuals may experience distress and less peer support than when accomplishing tasks according to the norm.

Neugarten & Neugarten (1987) suggested that there has been a "blurring of traditional life periods" resulting in time clocks becoming more flexible than in earlier decades. *Nontraditional* students return to school at age 35, 45, and older. Couples postpone having their first child. Marriage, divorce, and remarriage occur throughout adulthood, not just when young. Retired people take up a second career.

A century ago, with larger families and children spaced further apart, the last child married and the nest emptied when women were, on average, 55 years old. Today, this event occurs, on average, at age 47. This is the age also when the proportion of women in the labor market is at its highest. With the life span increasing and with people retiring later, there is time for women to embark upon a whole new career after rearing children (Neugarten and Moore, 1968). Neugarten (Rogers, 1986) calls the United States "an age-irrelevant society" because chronological age is becoming an ever-poorer indicator of how people live. Age alone tells nothing about an individual's economic or marital status, style of life, or health. After the first two decades, age diminishes as a basis for prediction (Rogers, p. 8). The boundary between young adulthood and middle adulthood is unclear.

But when does adulthood begin? Some theorists use the age of 18 as a benchmark because it is typically the point at which young people begin to assume responsibility for themselves and others (Bee, 1996). Bee (1996) defines development as "increasingly higher, more integrated levels of functioning" (p. 15). Nontraditional students are usually arbitrarily defined by age (25 and above) or by autonomy (no longer financially dependent upon others).

In 1983 Gill, Coppard, & Lowther posited that the common view of being an adult means having "come to terms with life, coping successfully with crisis, and being in charge of one's world. It is also viewed as a time of stability and maintenance instead of growth" (Rogers, 1986, p. 3). Many researchers would no longer agree with this view of adulthood, which is now seen increasingly to be a time of continual change and continual growth.

Researchers are beginning to question some of the assumptions of aging and medical advances are either arresting some of the changes or even restoring some functions (Whitbourne, 1996). Cosmetic surgery and organ replacement are more and more in demand. As people grow older they become more different; each person has a unique psychological and physical capacity to cope with the events in their lives. There are many steps that individuals can take to slow down the aging process, or prevent problems before they happen. Good diet and sufficient exercise and avoidance of bad habits are important considerations. Individuals can, to a certain extent, control their own destinies with regard to aging (Whitbourne, 1996).

. Vaillant (2002), director of the Landmark Harvard Study of Adult Development, wrote a book that details a major longitudinal compilation of data on human development, spanning a period of nearly a century. This data comes from the (1) Grant Study of Adult Development, begun at Harvard in 1938 which studied 268 socially advantaged Harvard graduates, from (2) the Inner City men, 456 socially disadvantaged men, and (3) the women from the Terman study, 90 women who had been precocious in their childhood. These three cohorts comprised of 824 individuals, helped to provide a framework for how older people become fulfilled or not, and what successful aging is, in the author's opinion, and how it can be achieved.

Interestingly, Vaillant claims that the phrase '*successful aging*' is not an oxymoron. He claims "the majority of older people, without brain disease, maintain a sense of modest well-being until the final months before they die. Not only are the old less depressed than the general population, but also a majority of the elderly suffer little incapacitating illness until the final one that kills them" (Vaillant, p. 5).

The implications for adult learning are that adults are living longer and healthier lives and frequently return to the classroom for personal and professional reasons. People now can be expected to live into their eighties, making changes in careers perhaps several times during their adulthood. The possibility of continued learning throughout their lifetimes, either on the job, or as a transition to a job, is more a reality now than ever before.

Abraham Maslow (1908-1970) emphasized *needs* that each individual must meet in striving to reach his or her potential. The goal is self-actualization, which means full development and utilization of talents and abilities (Maslow, 1954, 1979). Self-actualization comes only after other needs are met, beginning with physiological needs (food, housing, etc.), followed by safety needs, belongingness and love, and finally, self-esteem, before the pinnacle of self-actualization. "People who are self-actualized tend to be realistic, have a good sense of humor, be creative, be productive, and have a positive self-concept. But they aren't necessarily perfect. They can be cranky, absentminded, and single-minded in pursuit of their unique potential" (Craig and Baucum, 2002, 475). Maslow's description of the self-actualized, problem-centered person, committed to the benefit of others, is similar to Erikson's conceptualization of the generative person.

For Carl Rogers (1980) the core of human nature consists of healthy and constructive impulses. As a psychotherapist he attempted to discover the causes of his patients' anxieties, low self-esteem and interpersonal difficulties. He talks of *conditions of worth* which are what others impose upon us to become worthwhile human beings, beginning with our parents. He also proposes that we should view ourselves, and others,

with *unconditional positive regard.* By this, he meant warmly accepting others without reservations or conditions.

Important concepts within the psychological view are ego development, cognitive and intellectual development, moral development, faith and spiritual development, events and transitions in our lives, and development of relationships.

Merriam and Caffarella (1999) drawing on adult theorists like Neugarten (1968) and Havinghurst (1972), organized the ideas into three categories: (1) sequential models of development, (2) life events and transitions, and (3) relational models. Within the sequential are the popular "ages and stages" theories of Erikson (1963), Levinson (1986), and Kohlberg (1969). Of these many theories Erikson and Levinson have probably had the greatest impact on the field of adult education. Both maintain that stages or periods of development are hierarchical in nature, building over time in a predictable fixed order. I will begin with the sequential models of psychological development, move into transitions and end with relational models.

Sequential Models

A brief overview of Erikson 's theory (1959) of psychosocial development promotes stages over the life course, three of which occur during adulthood. Healthy development requires movement through each stage, as well as resolution of the task associated with it. All stages add to and influence one another. Each stage or period is identified by a pair of oppositional outcomes, one positive or healthy and the other negative. For example, in the first stage of adulthood, *intimacy versus isolation*, the young adult is challenged to establish one or more genuinely intimate relationships and

develop a sense of "we." In the second stage of adulthood, *generativity vs. stagnation*, the individual must find a way to support or contribute to the next generation by redirecting attention from self to others. Successful resolution results in "care." Resolution of the final stage, *integrity versus desp*air, culminates in "wisdom." In this final stage Erikson (1968) defines integrity as the acceptance of one's own life cycle and the people who have been significant to it.

Erikson assigned the task of identity formation primarily to late adolescence and early adulthood. For mothers, however, issues of personal identity may not become critical until the "empty nest" period of the late 30s and 40s. Sheehy (1976), said that women have always been concerned with generativity or serving others and that they do not have to overcome stagnation through generativity. She suggests that the midlife task for women demands that they overcome their dependency and realize their wholeness.

The writings of Levinson and associates (1978), and Vaillant (1977) are based on the fundamental ideas of Erikson's theory that changing circumstances and values in work and family relationships are the major preoccupations of adults, and the resolution of feelings about aging become increasingly important in the middle adult years. The work of these authors supports Erikson's proposal that adults continue to change and develop in certain ways throughout their life (Whitbourne, 1996).

By middle adulthood, traditional women were no longer the best adjusted; they tended to be over-controlled or dependent. The roles open to young adult women today usually combine career and family and being in congruence with societal expectations is important to individual well-being. Social support is important. Women can turn to their

colleagues at work, as well as elsewhere, for friendship, advice, and emotional support. (Levinson, 1978)

Vaillant (2002), drawing on numerous previous theorists, postulates a model that adds 'Career consolidation' and 'keeper of the meaning' to Erikson's eight. Mastery of career consolidation permits the adult to find a career that is both valuable to society and to self. Today, however, this could happen many times as adults, living longer lives, may have several careers. Keeper of the meaning involves passing on the traditions of the past to the next generation. It links the past to the future.

Life Events and Transitions

Some theorists tie these changes to age; others view them as bound by key tasks and responsibilities and by life events such as marriage or death or even as survivors of war and catastrophic natural events. According to Craig & Baucum (2002) "Changes in adult thought, personality, and behavior are much less a result of chronological age or specific biological changes than of personal, social, and cultural forces or events." Zemke & Zemke (1995) found that the more life-changing an event in an adult's life, the more likely it is to be associated with learning opportunities. According to this theoretical perspective, transitions, more than chronological age, provide the framework for understanding and evaluating human behavior. Thus, it is less important to know that a woman is forty-five years old than to know whether she is making a career change, caring for an aging parent, or newly married.

Aslanian & Bricknell (1980) interviewed 2000 American adult learners, age 25 or older. Most respondents (83%) said they were learning to cope with career, family,

health, religious or citizenship changes. At the beginning of their study is a quote by John Gardner: "No doubt the greatest opportunities for self-renewal and new growth occur at those periods of life when one's role changes." Transitions are triggers for new learning. At the time of a life change or transition, the adult needs to become competent in something in order to succeed in the new status. For women, family is the biggest trigger, and second is career. For men, it is just the opposite.

In the models above autonomy is considered to be what characterizes mature adult life. This tenet was grounded in the work of others from the psychological tradition of development, which posited autonomy as the pinnacle of human development (for example, Maslow, 1979; Kohlberg, 1973). Labouvie-Vief (1985) posits that autonomy arises from an awareness of the genuine complexity of the social system, an awareness that is gained in middle age. Now it is commonly accepted that relational aspects, connectedness and interdependence, are as important in the developmental life process as autonomy and that context is highly important as well (Gilligan, 1982; Clark & Caffarella, 1999; Belenky et al.1986).

In psychological theories of adult development we have considered (1) sequential "ages and stages" theories and models based upon (2) life events and transitions. The third category (3) of adult development theories that relates to this research is relational models.

Relational Models

The third category, relational models, has largely been built from the experiences of women (Jordan 1997). This incorporates an ever-changing web of interconnectedness to describe how women (and some men) grow and develop throughout their lives.

Important in this relational category is the work of Belenky et al. (1986) who postulate the emergence of voice as central to the development of mind and self in women. Traditionally, in our culture and many others, women's voices have been silenced or considered unimportant. In their critically acclaimed *Women's Ways of Knowing*, Belenky et al. name five categories in the sequential development of women's knowledge: *silence, received knowledge, subjective knowledge, procedural knowledge, and constructed knowledge.* Integration of these five categories represents the developmental ideal for women. The ways of knowing that women have cultivated and learned to value (hesitant, qualified, question-posing, concern for the everyday, the practical, and the interpersonal, and the inner voice of intuition or subjective knowledge) have been neglected and denigrated by the dominant intellectual ethos. The women's movement and books such as Sheehy (1976) and Belenky et al. (1986) have sensitized the public to the unique contributions that women can make to public and classroom discourse. The significance of relationship in women's lives has been widely touted ever since Gilligan (1982) and others popularized the idea that a woman defines herself and views her world primarily in relationship to others. The concept of "connected knowing" was introduced by the authors of *Women's Ways of Knowing* (Belenky et al. 1986). They proposed "connected teaching" to support this way of knowing. It was intended to contrast with traditional modes of education that presumably emphasize separate

knowing. These ideas, which resonate with the experience of many women, offer intriguing ideas about how relationships might influence women's learning.

Peck (1968) and Kegan (1994) are two theorists who seek to represent development as involving both separation and connection. Women's need for attachment and their potential "loss of self" within these connections is a salient feature. Peck's model depicts women's identity as funnel-shaped, expanding as she grows and develops. The funnel is placed within a cylinder-the social-historical time dimension-which may contract or expand. In the 1950s , for example, postwar conservatism reversed women's wartime gains in social and economic freedoms. The late 70s, by contrast, were a time of expansion, as the women's movement supported greater professional and personal opportunities for women. All of this structure, however, rests on the *sphere of influence* which is the family, work relationships, and social-cultural identifications and how they relate to a woman's sense of self.

Researchers now believe that people generally remain the same throughout their lives in the degree to which they attach themselves to others. Formerly disengagement or distance from others was associated with aging (Havighurst, Neugarten & Tobin, 1968). Now it is understood that disengaged individuals exist across the life span (Rogers, 1986).

Kegan (1982) views adulthood as a time of continued change and growth. He has identified five possible transformations throughout the life span. Two are associated with childhood and three with adulthood. The two from adulthood are relevant to our purposes. The first of these is the move into adult consciousness in which adolescents move into valuing others for the connection they represent, rather than for what they can

provide. He calls this *third-order consciousness* and in some measure it is what society considers to be growing up. The second in adulthood is the transformation of that perspective and represents what most people associate with midlife change. This is the fourth-order consciousness. Merriam and Caffarella (1999) observe that, according to Kegan, the capacity both to experience, and to observe oneself experiencing, is a hallmark of development that goes beyond the position of being defined by others (third-order consciousness), toward the position of self-definition (Kegan's *fourth-order consciousness).* Knowles (1973) describes these "dimensions of maturation" as moves from dependence to autonomy, passivity to activity, subjectivity to objectivity, and selfishness to altruism. These changes correspond to Kegan's "three/four" shift.

Socio-cultural considerations

Adulthood, especially aging, can be seen to be socially and culturally determined. It is a concept perceived by others. The eighty year old who is revered in China may be considered an irrelevant old fogy in the United States. In the sociological view, social and cultural aspects of our lives are the primary forces for growth and change. The social roles we play; worker, friend, parent, etc. are key to this view. Recently a great deal of attention has been given to socially constructed ideas of race, ethnicity, gender, sexual orientation, and social class as they relate to development (Tennant & Pogson, 1995; Evens, Forney, & Guido-Dibrito, 1998; Merriam & Caffarella, 1999). Bee (1996) supports the idea that socio-cultural factors shape the direction of our life course. However, it is difficult to determine which factors have the most influence upon our

lives. I have chosen, however, to focus upon gender since that appears to be one of the most relevant of these factors to this work.

For decades the research on adult development focused primarily upon men. In response, a wave of research on women's development followed. Initially research on women's adult development focused on expanding or challenging existing models derived from the research on men's lives (Rogers, 1996). An example of this work is Josselson (1987) who re-examined Levinson's work, with a particular focus on the identity development of women.

Perry (1970) studied the cognitive development of young adults, most of whom have been college students, all of whom were male. In an extension of Perry's work, Magolda (1992) conducted a longitudinal study of male and female college students. Magolda concluded that there was developmental change in how students reasoned and in what they valued in the teaching-learning transaction as they progressed through college. She found there were gender-related patterns within each of the three stages, as evidenced by a sufficient numbers of students to allow gender comparisons.

These studies, and others, point to the dominance of connection over separation in women's lives. This contrasts to the view of autonomy as the hallmark of adult development portrayed in adult models fashioned from the study of men's lives. It is now commonly accepted that connectedness and interdependence are as important in the developmental process as autonomy and that context is highly salient (Clark, 1993). Bardwick (1990) in *Where We Are and What We Want: a Psychological Model* says that "most women now in their thirties [1990] began adult life psychologically traditional but they could not escape awareness of feminist values. Most are married, now the mothers

of school-age children who will need less and less mothering. Their husbands are increasingly involved in work where they must make their mark by their late thirties or never. As their late thirties arrive, most of these women will probably change their lives. Many will return to work, or work more ambitiously; some will return to school..." (Bardwick, 1990, p. 200). Are these observations still true in 2005? The answer to that is beyond the scope of this study but the females in this study do seem to fit this demographic.

Middle-aged Adults

Those individuals who are age 40 and above are commonly considered middle-aged. As for when it begins and ends, much depends on the life experiences the person is going through. Some people feel that they are middle aged when their children begin to leave home. Many realize they are no longer young, yet they feel satisfied and can finally pay attention to their own wishes and desires. In fact, middle-agers can manage their own lives to a greater extent than at any other age. These are the decision makers in government and in corporations. This generation of adults in midlife is better educated and healthier than ever before (Craig & Baucum, 2002). Middle-aged adults are the ones who make the financial, social, and political decisions that shape the future of families, organizations, and institutions (Stevens-Long, 1990).

The workplace, for most middle-aged adults, serves as a context for continued development of cognitive skills. Those who are challenged by complexity in their work achieve higher scores on tests of intellectual flexibility than those who perform routine work (Kohn, 1980; Schooler, 1990). Most teachers would fall into this category. They

are in a career that involves complex decision-making and independent judgment, both of which foster cognitive development.

According to Erickson, the central task at this time of life is to resolve the task of generativity versus self-absorption, the seventh of the life stages. This can be *procreative* or giving and responding to the next generation or *productive*, by caring for the next generation, or *creative*, by contributing to society on a larger scale. This may be expressed through community life, through immersion in parenting or grand parenting, and caring for loved ones, maybe parents, or by teaching, or by a combination of these and more. The alternative is self-absorption and a sense of stagnation and boredom. Some fail to find value in helping the next generation and have feelings of having lived an unsatisfying life.

Middle-aged adults are the bridge between the younger generation (their children) and the older generation (their parents). The adjustments required for their changing roles offers new perspectives. More than any other group, they must live in the present. Young people look ahead and older people look behind. But middle-aged adults must live in the here and now. That includes maintaining family rituals, celebrating achievements and holidays, and keeping alive family histories. This is what Vaillant (2002) called the "keepers of the meaning." In a larger sense, he uses this term to refer to the conservation and preservation of the collective products of mankind, the culture in which one lives and its institutions.

In her book on *The Adult Years* (1986) Rogers says, "Middle-age is a somewhat fluid concept. It changes over time as society revises its image of what people in these years are supposed to be like. What are now the middle years in the United States were

once the later years for most of the population. This observation is still true in certain countries" (Rogers, 1990). Middle-agers take care of themselves and others, who may include children and parents both. Most are managing households, childrearing, and careers, which means problems with managing time. In addition to their complex responsibilities, they are concerned with making a contribution to society and perhaps beginning a new career. They are active mentally and physically. They are generally more mellow now in their attitudes and tolerances. Women, however, often have a newfound assertiveness, especially those women who are now free of their childrearing role and are looking for additional challenges.

Major career changes occur in mid-life. This is a period of serious career reassessment. Workers may find that they are not being promoted as rapidly as they expected or that a job may be less desirable than anticipated. Their abilities may be underutilized. Another reason is job burnout-a feeling of being unable to endure the job any more; this most frequently happens to individuals in the helping professions such as teachers or nurses. Downsizing and outsourcing may push others out of work. Because people live longer, they may respond to dramatic alterations in their values and attitudes and feel they have time to act upon them. So perhaps one spouse continues to work while the other makes a career change. The average woman can devote ten years to full-time child care while her children are young and still have 35 years left to enter the workforce (Daniels & Weingarten, 1982). The one-career pattern no longer applies to most people.

Concluding Perspectives on Adult Development

The literature on adult development has had and is having a far-reaching impact upon the field of adult education. It has shaped the theory and practice of adult learning. Beyond how we can teach most effectively, these linkages have caused us to be sensitive to how the biological changes of aging affect learning and how life events create incentives for further adult learning. There is reason to believe that trends will continue and that more attention to the interaction of learning and development and their impact on each other will continue. At age forty, life expectancy is approximately forty more years, years that will continue to produce change.

Nemiroff & Colarusso (eds.,1990) state that "part of the reason the adult has been conceptualized as static, as opposed to dynamic in psychological development has been the failure to recognize the scope and subtlety of psychic change in adulthood "(p. 43).

The formation of the psychic structure occurs in childhood; in adults it becomes more finely tuned. The hypothesis they promote is thus: *Whereas childhood development is focused primarily on the formation of psychic structure, adult development is concerned with the continuing evolution of existing psychic structure and with its use.*

Clearly the journey through adulthood is shaped by multiple psychological, social, physical, and emotional influences. Together these provide a context that is uniquely one's own. Theories of adult development help to provide a road map for this journey. Currently, adult development is being studied by researchers at Harvard, Berkeley, Chicago, and UCLA, all highly respected institutions.

Adult Learning

Most of the work in cognitive studies is built upon the work done by Piaget (1896-1980), the Swiss cognitive theorist. As a result of his research with children he proposed four stages of cognitive development. The fourth and final stage, the formal operations stage, is when individuals can use abstract rules or generalizations to attack problems, and think abstractly without use of concrete proofs. According to work done in the early part of the twentieth century, it appeared that adults stabilize in early adulthood and remain reasonably constant through adulthood.

We now believe that what happens to intelligence after adulthood depends on an individual's personality and experience (Goleman, 1980; Vaillant, 2002). One of the criticisms of Piaget's work is that the formal operational thinking stage is not necessarily the final stage. Thought structures, or patterns of intellectual function, may continue to change progressively beyond this level throughout adulthood (Gruber, 1973).

Vygotsky (1935/1978) of the former Soviet Union was the first to emphasize the social context in which much of children's development takes place. Vygotsky concluded that we understand our world only by learning the shared meanings of others around us who are all part of our culture.

People in middle adulthood function best when they can use the wealth of background and experience they have accumulated (Labouvie-Vief, 1985). Older adults may use a qualitatively different mode of thinking – one that goes beyond the information given, while college students appear to accept tasks at face value, motivated by the need for compliance with authority (Labouvie-Vief & Blanchard-Fields, 1982).

Blanchard-Fields (1986) compared performance on problem-solving situations with varying emotional content among adolescents, young adults, and middle-aged adults. Adolescents found it more difficult to reason abstractly about problems with a high degree of relevant emotionalism. The adults were able to separate their cognitive reasoning processes from affective components. This, and subsequent research with an older population, supported the idea that greater experience improves an older individual's ability to reason objectively in emotionally relevant situations (Blanchard-Fields, Jahnke, & Camp, 1995).

It is believed that there are sex differences in cognitive development. Women, on average, perform well in verbal meaning, reasoning, and word fluency, which reflects their more verbal type of life, whereas males are superior in thinking with numbers, spatial relationships, and, perform better in some tests of general intellectual ability (Schaie, Labouvie, & Buech, 1973). However, intellectual abilities vary greatly within each sex and are affected by cultural expectations. Even in childhood, boy's toys and games are generally more mentally challenging than those of little girls. In middle age, after the children have left home, better-educated women find it easier to find new interests and activities. Men have greater opportunities throughout life to interact with stimulating work and social environments and so they perform better (Rogers, 1986). A study by Harrington & Harrington (1995) studying the effects of gender and age on testing performance on the PPST (Pre-Professional Skills Test) found that older students (over 24 years old) did significantly better than younger students (23 and younger). In fact, the older females also outscored the older males on the reading subtest.

We have talked little of cognitive changes. Some aspects of intelligence actually increase during middle adulthood and beyond, especially for college-educated adults who remain active (Schaie, 1983, 1995). This leads to the concepts of fluid versus crystallized intelligence, proposed by Cattell (1965) and later studied by Horn (1982). *Fluid intelligence* means abilities that we apply in acquiring new knowledge and skills, including memorizing, reasoning inductively, and perceiving new relationships between objects and events, solving problems, and analysis. *Fluid intelligence* is thought to increase until early adulthood and then decline gradually throughout the remainder of life.

In contrast, *crystallized intelligence* is the knowledge that comes with education and life experiences in general, the body of knowledge that a person accumulates over the years. It also is used in finding new relationships, analyzing problems, and making judgments, but it differs in that previously learned strategies are employed to a greater extent. It is acquired through formal education and through acculturation. Unlike fluid intelligence, crystallized intelligence tends to increase over the lifespan (Craig & Baucum, 2002).

Environment is an important factor in cognitive differences. People who had more opportunity for environmental stimulation, greater satisfaction with life, less noise in their environment, and a lot of social interaction and positive cultural influences showed longer maintenance of, and even increases in, intellectual prowess (Schaie, 1983).

Adult education as a professional field of practice is a twentieth century phenomenon. The first book to report results of research on this topic is *Adult Learning*

(1928) by Thorndike, Bregman, Tilton, and Woodyard. It was published just two years after the founding of adult education as a field of practice. Some eighty years later, there is still no one theory or model of adult learning. Instead we have a mosaic of theories, models, sets of principles, and explanations that compose the knowledge base (Merriam, 1998). This field is dynamic and changing.

In the 1950s Houle (Knowle's mentor) began a line of investigation at the University of Chicago that was extended by Tough at the Ontario Institute for Studies in Education (Houle, 1996; Tough, 1971). It was a study consisting of in-depth interviews of a small sample of adults (N=22) identified as continuing learners. The study was designed to discover why adults engage in continuing education. Tough saw three types of learners: *goal-oriented learners* who used education for accomplishing certain objectives, *activity-oriented learners* who take part because they find some meaning from it when their problems or needs became sufficiently pressing, and the *learning-oriented*, who seek knowledge for its own sake and have been engrossed in learning as long as they can remember. Tough also found that his subjects organized their learning efforts around projects with a goal of a product or some lasting change in themselves (Knowles, 1973). For example, the learner might need a new roof on his house and plans to do it himself so he embarks upon a learning project about roofing.

Knowles' theory is that "as an individual matures, his need and capacity to be self-directing, to utilize his experience in learning, to identify his own readinesses to learn, and to organize his learning around life problems, increases steadily from infancy to pre-adolescence, and then increasingly rapidly during adolescence" (Knowles, 1973, p.

43). Still, people's motivations for learning shed little light on differences of adult learners as compared to children who are learners.

Houle writes that what is significant about Knowles' work is that educators "should involve learners in as many aspects of their education as possible and in the creation of a climate in which they can most fruitfully learn" (Houle, 1996, p. 30)

Tough (1967,1971), building on the work of Houle and Knowles, provided the first comprehensive description of self-directed learning. He documented it in a study of learning projects of sixty-six Canadians. Self-directed learning is widespread, occurs as part of adults' everyday life, is systematic yet does not depend on an instructor or a classroom.

The literature base for SDL is wide. Contributing to it has been fourteen years of meetings of the annual International Symposium on Self-Directed Learning (Merriam, 2001). In a content analysis of 122 articles on self-directed learning published between 1980 and 1998, Brockett (2000) found a steady decline in the number of articles since 1985. As a result he suggests that rather than moving away from thirty years of scholarship on SDL it makes sense to take it to a new level.

Not everyone has the capacity or the desire to go off and learn largely on her own. Some may feel lost or frightened. Some may struggle. For others, however, it renews and sustains their love of learning. Taylor & Marienau (1995, p. 90) note Kegan's observation that "many self-directed adult programs unwittingly assume that learners have already achieved the level of consciousness they are only beginning to move toward." Self-assessment and journal writing in narrative form are ways of moving

toward that level of consciousness, to encourage habits of mind to promote reflection and self-direction.

A concept that is seen frequently in literature about adult learning is transformational learning. "Learning environments that intentionally support and acknowledge development are bridges toward change, both for reentry students and for the education process itself" (Taylor & Marienau, 1995, p. 11). Mezirow (1991) describes learning as transforming the meaning we make out of our experience; Kegan (1994) calls for transformational rather than informational learning in order to meet the demands of modern life.

Transformation changes the way people see themselves and their world (Clark, 1993). Transformational learning theory has been conceptualized several ways (Mezirow, 1991; Clark, 1993; Dirkx, 1998; Elias, 2000). Dirkx's four-lens approach provides a useful way to think about these unique transformational learning experiences. One lens is drawn from Freire's (2000) notions of consciousness-raising. Freire believes that education was for the purpose of liberation. He felt that the "banking method" of education emphasizes passive listening and acceptance of facts and thus keeps students disenfranchised.

Mezirow's (1991, 2000) cognitive-rational approach, the second lens, shares theoretical underpinnings with Freire. Both perspectives assert that adult education should lead to empowerment (Freire, 2000; Mezirow, 2000). Freire's focus is social injustice while Mezirow concentrates on the importance of rational thought and reflection. In order to validate their new perspective people engage in "reflective discourse" (Mezirow, 2000, p. 11). Finally, action is necessary; not only seeing, but

living the new perspective. Mezirow was criticized for ignoring the affective, emotional, and social context aspects of the learning process (Lucas, 1994; Taylor, 1994). However, Mezirow does now acknowledge their importance in the process of making meaning (Merriam, 2001).

The third of Dirkx's lenses is articulated in Daloz's writings (Daloz, 1986, 1999). Daloz, a college teacher and administrator, examines education and development and observes that students are often in a developmental transition and they look to education to help them make sense of their lives. His approach is intuitive, holistic, and contextually based. Daloz humanizes the transformational learning process as he shares stories of student struggles.

A fourth lens champions the link between spirituality and learning (Dirkx, 1997, 1998). Dirkx makes a case for transformational learning having a spiritual dimension. The role of imagination is seen as going beyond the rational approach that relies on words to communicate ideas to soul-based learning that emphasizes feelings and images.

Emotions and imagination are integral in adult learning because they either impede or motivate learning (Merriam, 2001). Emotions inform us of deeply personal, meaningful connections that are being formed within an experience. Merriam (2001, p. 67) shares her educational experience, "In recalling incidents of memorable learning, participants in the author's teaching-strategies course typically describe experiences in which there was a strong, positive, emotional, or affective dimension, such as a supportive climate, a caring teacher who listens to us as individuals, a teacher who respects us as persons, or a teacher who involves the whole person in the learning experience." More and more research suggests that emotions and feelings are more than

merely a motivation for learning. Postle (1993) argues that affective, emotional aspects provide the "foundation on which practical, conceptual, and imaginal modes of learning rest" (Merriam, 2001). In *Emotional Intelligence,* Goleman (1995) suggests that emotions are deeply interrelated with perceptions and the processing of information.

Dirkx (2001) concludes his chapter in Merriam (2001, p. 70) called, "The Power of Feelings: Emotion, Imagination, and the Construction of Meaning in Adult Learning" with the following"

> The imaginal method seeks a deeper understanding of the emotional, affective, and spiritual dimensions that are often associated with profoundly meaningful experiences in adult learning. Journal writing, literature, poetry, art, movies, story-telling, dance, and ritual are specific methods that can be used to help foster the life of the image in our relationships with adult learners. By approaching emotionally charged experiences imaginatively rather than merely conceptually, learners locate and construct, through enduring mythological motifs, themes, and images, deep meaning, value, and quality in the relationship between the text and their own life experiences.

A practical implication of these theories is that knowledge for the learner does not exist in books or in the experience of the educator. "It exists only in the learner's ability to construe and re-construe the meaning of an experience in his or her own terms" Mezirow, 1991, p. 20). In his 1991 book on transformative learning, Mezirow says,

"The transformations likely to produce developmentally advanced meaning perspectives usually appear to occur after the age of thirty." He calls perspective transformation the central process of adult development.

Summary of Framework of Adult Development and Adult Learning

The purpose of this exploration of adult development and adult learning has been to provide a conceptual framework or a lens through which to view the literature that

relates to nontraditionally aged teacher education students. The study of adulthood has occurred primarily in only the last century. Middle adulthood is the least studied of adult stages.

Biological change is more visible and has been more extensively studied because of interest in promoting health and long life (Whitbourne, 1996; Vaillant, 2002). Psychological and sociological changes have also been the subject of research over much of the past century with many theorists offering their ideas, often as ages and stages (Jung, 1931; Erikson, 1959; Havinghurst,1972; Kohlberg, 1969; Levinson, 1978, 1986, 1996; Maslow, 1954, 1979; Rogers, 1986; Neugarten, 1968, 1987; Bee, 1996). Men were frequently the subjects for adult research, which had the effect of marginalizing women and diminishing gender differences. (Gilligan, 1982; Belenky et al., 1986). With women included as research subjects, relationships were seen as instrumental to self-definition (Kegan's fourth-order consciousness). Autonomy, as in Maslow's goal of self-actualization, was still seen as important, but so was relationship (for women especially) with connectedness and interdependence (Josselson , 1987).

Nontraditional students returning to school are examples of Neugarten's (1987) age clock with events occurring later in life than the norm. Age, after the first two decades, diminishes as a basis of prediction (Rogers, 1986). Adulthood, which was historically looked upon as a time of stability, is now seen more as a time of continual change and growth (Kegan, 1982) or at least as a time that is characterized by periods of stability alternating with periods of change with the periods of change seen as providing greater opportunities for growth (Zemke & Zemke, 1995). Mezirow says that perspective transformation is the central process of adult development.

Developmental tasks and social roles of adult life are seen to be closely tied to an adult's readiness to learn (Knowles, 1980). Piaget's work with the construction of cognitive development ends with the formal operation thinking stage (about age 11 or 12), leading to the assumption that development ends then. In fact, other researchers have found that changes continue as people grow older (Gruber, 1973; Schaie, 1983; Labouvie-Vief, 1985; Vaillant, 2002), most of it in positive ways, providing the adult has remained active mentally and socially. Self-directed learning has been identified as central to adult learning (Knowles, 1973; Houle, 1996; Tough, 1971). When development is acknowledged and adults are in supportive environments where they can make meaning of their life and job experiences, learning can be a bridge toward change. This kind of learning is called transformative learning (Kegan, 1994; Mezirow, 1991; Taylor & Marienau, 1995). It changes the way people see themselves and their world. It changes their world-view. It changes their schema.

And that brings us back to Mezirow's change in perspective as a central feature of adult development. Learning exists in the learner's ability to construe meaning from experience. Thus life and job experience affects the attitudes and perspectives of older adults and becoming a teacher may indeed provide a different experience from that of traditionally-aged preservice teachers.

The Literature of Nontraditional Students

The following parameters were used to guide the choice of studies included in this literature review. All are *research based*. *Nontraditionally aged learners* (above the age

of 25) are all or part of the research participants. The studies must be relatively *recent research*, most from the 1990s and after, although some were done in the 1980s.

The beginning studies look at nontraditionally aged students, found in all disciplines of higher education. The remaining studies look at nontraditionally aged students in *teacher education* (Table 2). Finally, Table 3 summarizes studies reviewed of research using autobiographical and life histories in teacher education. So we will look first at non-traditionally aged students.

Who are these non-traditional students?

Although today's college campuses are still filled with 18 to 24 year-olds, they are also filled with older, nontraditional students who return to school. According to Aslanian's College Board study (1996) nearly 50% of all college students in the United States are at least 25 years old. The National Center for Education Statistics places the figure at 39% in 1999, the last year for which they have data. (U.S. Dept. of Education 2002b). This compares with 28% in 1970. Whatever the actual percentage is, which varies with the definition that is used for nontraditional, all sources agree that the numbers of nontraditional students throughout the nation are climbing.

Twenty-five is the age most often used in the literature for the break between traditional and non-traditional students in higher education. However, many students who began college right after high school (another identifying factor) are 25 years old before they graduate from traditional baccalaureate programs, a factor which confuses interpretation of the statistics. There is sometimes too much overlap to make clear distinctions when interpreting the data. Besides age, financial independence is also used

as an identifying factor. In the Chronicle of Higher Education, Evelyn (2002, p. A34) states that almost 75% of today's undergraduate students are considered "nontraditional," because of age, financial status, or when they enrolled in college." Although age is the most common identifier in the literature, Evelyn says, "the most common nontraditional characteristic is financial independence, with some 51% of undergraduates included in that category". There is more agreement upon a definition of "traditional" college students; they have a high-school diploma, enroll full time right after high school, and depend on parents for financial support. This group constitutes only 27 percent of undergraduates (Evelyn, 2002).

There is an increasing recognition that humans are life-long learners. Often it is because they need to gain the information and skills required to meet the changing workplace. Sometimes it is because they themselves are changing and their response is to learn. These nontraditional students are called the "mature," "reentry," or "adult" learners. Most often, however, they are designated nontraditional students.

The differences between young student teachers and older ones, based upon their year long study of 45 elementary education preservice teacher candidates (18 are NTs) enrolled in a student teaching course at a large university, have been summarized by Rodriquez & Sjostrom (1998) in Table 1.

Table 1: Descriptive comparison of characteristics of nontraditional and traditionally-aged student teachers

Non-traditional Adult Student Teachers	Traditional Student Teachers
1. Analytical about experience (in-depth discussions, more questioning of beliefs, etc.) [reflective practitioner]	1. Descriptive about experience (little detail or reflection included)[procedural/behavioral practitioner]
2. Self-initiating (more independent, inclined to assume professional teaching responsibilities early on) [self-directed]	2. Less self-initiating (more dependent on external feedback in assuming professional teaching responsibilities) [directed by other]
3. Self-confident about goals, capabilities, and desire to teach early in the experience [professional efficacy]	3. Less confident about goals, capabilities, and desire to teach until later in the experience [low professional efficacy]
4. Student/ learner centered early in the experience [focused on learning and developed]	4. Curriculum/lesson centered until late in the experience [focused on teaching performance]
5. Career/job focused [future orientation]	5. Completion of experience focus [present orientation]
6. Perception of themselves as practitioners in need of time and practice [teaching as a developmental process]	6. Perception of themselves as students who need to learn the skills from scratch and within semester timeframe [teaching as acquisition of skills]
7. Perceive mistakes as developmental, part of the process of trial and error; leading to success [enrichment]	7. Perceive mistakes as deficiencies working against overall success [deficit]
8. Aware of consequences of behavior vis-à-vis culture and politics of schools [future orientation]	8. Less aware of consequences of behavior vis-à-vis culture and politics of schools [present oriented]
9. Able to develop collaborative professional relationships [collegial, peer-like interactions]	9. Worked cooperatively but subordinate to cooperating teacher; hierarchical relationship [expert dependent]

Source: Rodriguez & Sjostrom (1998). *Journal of Teacher Education.* May-June1998, 49(3):181

Characteristics of Nontraditional Students

The descriptive comparisons of Rodriguez & Sjodstrom are supported by the research of others. These middle-aged students were often found to be more conscientious about their work, more focused on their goals, more regularly attend classes and get better grades than other segments of the college student population (Carney-Crompton, 2002; Eifler & Pothoff, 1998; Justice, 2001; Donohue & Wong, 1997; Rodriguez & Sjodstrom, 1998). On average, they enjoy going to classes and doing homework more than younger students (Dill & Henley, 1998). Melichar (1994) reports that the 400 college instructors she surveyed were overwhelmingly more positive toward nontraditional students than traditional students. They cited their ability to concentrate, sound reasoning and listening skills, eagerness to learn, initiative, and time management.

Nevertheless, self-doubt is common when the older student returns to the school environment. Will I be able to do this? Rogers (2001) quotes the authentic voices of adult learners telling how they felt. They used phrases such as "…I felt that there was a severe risk of being out of my depth", "…I really thought I was likely to be shown up as a fraud" and "What if I say something silly?" (Rogers, 2001, p. 8). Generally this self-doubt diminishes over time as the students gain confidence. Older women students are often the best students but they do not know or believe that fact at the beginning of their return to school (Aslanian, 1996). Overall, in fact, they have reported *lower* levels of academic achievement-related anxiety (Nunn, 1994; Yarbrough & Schaffer, 1990) than their traditional counterparts. This finding was supported by the work of Dill and Henley (1998) in their study of perceptions of stressors.

Compared to the traditional students, nontraditional students often occupy a greater variety of roles (e.g., parent, employee, student, child of aging parents).

Jacobi (1987) reported that the nontraditional students had significantly more time constraints and role conflicts than the traditional students. Marriage and family concerns demand a larger part of their time. Feistritzer & Chester (1996) found that two thirds of nontraditional students are married and over half have children.

Even with time constraints and role conflicts, the nontraditional students reported significantly less academic stress, greater satisfaction in the school domain, and experienced significantly fewer health problems (Jacobi, 1987). In a study of multiple roles, Gerson (1985) compared nontraditional students with housewives. The nontraditional students experienced significantly more benefits than the housewives did, such as greater self-respect and respect from others, a more diversified life, and less boredom. They did, however, report several disadvantages, such as incompatible demands and tenseness. Novak & Thacker (1991) reported that 68% of the participants in their study of nontraditional students felt above average satisfaction in the student role, although 85% felt strained. Conflicting time demands and anxieties about their academic ability were the major strains (even though the latter was reported to be less of a problem than with traditional students). Kirk and Dorfman (1983) looked at role strain and satisfaction of nontraditional women students. These women reported that time and role demands were the major strains. Women with younger children reported the most strain in their role of student.

Researchers comparing traditional and nontraditional female students (Kevern et al, 1999; Makinen & Pychyl, 2001) found that both psychological and academic

performance improved as a function of age. Generally, the more chronologically mature the student, the better her psychological and academic status.

Based upon a study by Jacobs and King (2002) women over age 25 are at a disadvantage in completing their degrees. Their data come from the 1995 National Survey of Family Growth. Jacobs and King, in their research about age and college completion, found that the biggest factor that accounts for the effect of age on completion is part-time status. They say that "among older women who return to college full time and who are childless, the chances of completing college are similar to those who enrolled in their early twenties. However, older women, enrolled part time, who delayed entry into college, and who have become mothers are much less likely to complete their degrees"(Jacobs & King, p. 222). They suggest that, in policy terms, programs could be developed to facilitate full-time enrollment in order to improve degree-completion.

Differences and Similarities Between Traditional and Nontraditional Students

There are differences between traditional and nontraditional students in many aspects of their lives. Social and peer events had greater significance for the traditional students. They reported more problems with peers but also more time spent with friends and peers, especially events such as parties and club events. For nontraditional students, the social network consists more of family members. Also they probably do not have as much time to spend with friends and peers due to other obligations. Traditional students also reported more vacations, trips, and summer breaks than nontraditional students. Differences were found between the groups in the category of intimacy, sex, and romance, as expected, since nontraditional students are older and more likely to be married or to have a current relationship (Dill & Henley, 1998; DeBlois, 1993).

Many differences between traditional and nontraditional students have been noted by several investigators (DeBlois, 1993; Devlin, 1996; Dill & Henley, 1998; Donohue & Wong, 1997; Haipt, 1990; Manos & Kasambira, 1998; Powell, 1992). When comparing one group of people with another, it is worthwhile to note that there are always more overall similarities than differences. Caution must be used in making recommendations that accentuate those differences. Students in classrooms benefit from hearing diverse perspectives. Often what benefits one group of people will benefit all. For example, the year-long mentoring, commonly required in Alternative Certification Programs, may also prolong and enhance the learning of traditionally prepared beginning teachers (Guyton, Fox, & Sisk, 1991).

Kile (1993) examined differences in conceptions and beliefs of a group of 22 elementary and secondary majors, a mixed group of traditional and non-traditional status. The nontraditional students appeared to understand the complexities of teaching and learning more than the traditional students. For example, traditional students believed that they could determine whether or not students were learning from their classroom behavior, in their view if the students looked like they were enjoying the activity, they were learning what the teachers wanted them to learn. Nontraditional students believed that student learning could only be determined through an examination of student work. Additionally, Kile found that traditional students, compared to nontraditional ones, were more surprised at the academic diversity in classrooms and did not indicate a need to adapt instruction and materials for different students.

Implications of non-traditionally aged students for higher education

Since the nontraditional student makes up the fastest growing segment of the higher education population, questions are being raised about how best to recruit, retain, and graduate this population. Colleges and universities are accommodating this growing segment of their population more and more by having more evening classes for part-time students and by making it easier to obtain financial aid and transfer of credits. Flexibility is in the best interests of the schools and of the nontraditional students. But there is much more they could do.

In a survey of 290 nontraditional students at Bradley University conducted in 1997, student responses include the following ideas for campus support: more study areas on campus, longer bookstore hours, reserved dorm rooms for those who travel from a distance and may need them for one or two nights, availability of coffee and snacks in the evening hours, weekend highly concentrated classes, orientation for new nontraditional students, mailing newsletter and registration to homes, web sites of program requirements and course syllabi, providing one evening program adviser to guide registration and answer student concerns, and providing an organizational process for openly discussing nontraditional student issues. (Manos & Kasambira, 1998).

One relatively easy way for all universities to support nontraditional students is to facilitate cohort groups of support. This may happen naturally as the students take the same classes. Professors can help to encourage this with assignments of group projects.

The Literature of Mature Aged *Teacher Education* Students

Eifler & Potthoff's review of forty studies of nontraditional teacher education students seemed to provide a good beginning. However, they claim that "only 12 [of the 40 studies] were research-based" (Eifler& Potthoff, 1998, p. 187). This raises the question of why the other 28 are called studies. They found that "studies" of alternative certification programs dominate the literature. They chose to focus on a subset of nontraditional teacher education students, those changing careers. They do not tell how many are in this subset. They comment on the characteristics and needs of older students, show how older students were dealt with programmatically and transitioned into their own classrooms. They conclude with practical implications and further research ideas. One of their conclusions is that teacher educators need to adapt to teaching experienced adults with novice needs and that researchers must be more aggressive about finding and studying nontraditional teacher education students in regular teacher education programs. Eifler & Pothoff's review contained very little detailed information or critique of the studies.

Manos & Kasambira (1998), in their survey of 290 nontraditional students in teacher education programs, found that respondents consisted of those who seek career changes, former teachers returning for current or expanded certification, older students seeking degrees and certification (some after rearing a family), early retirees from the military or other fields, delayed entrants updating their certification, minority students recruited with corporate funds, and teacher aides seeking to upgrade their job classification (Feistritzer & Chester, 1996; Neapolitan, 1996).

Challenges

Aside from time constraints and the demands of multiple roles, there are other challenges for the nontraditional teacher education students. Some of those challenges, reported in several studies, are novice status, parochialism, nontransferable skills, unrealized ideals, and finances (Eifler & Pothoff, 1998; Haipt, 1990; Manos & Kasambira, 1998).

Novice status

Starting in a new line of work is hard and challenges the ego. Students may find it unpleasant and even traumatic to be a novice at a point in their lives when they may have already experienced successful careers and raised families (Dill, 1990). Teacher educators in schools may unwittingly exacerbate this discomfort by making unwarranted assumptions about the novice teachers' skills based largely on their ages. This sometimes result in little supervision and help from veteran teachers.

Parochialism

Beginning teachers may think their way is the only way (Dill & Henley, 1994). Studies of former military personnel and vocational teachers recruited from technology and industry had unrealistic expectations of young people and were frustrated when the strategies they had used working with adults were ineffective with young people (Camp & Heath-Camp, 1992).

Non-transferable Skills

The skills that may have made second career teachers successful in previous careers may not be the skills necessary for successful teaching. Camp and Heath-Camp (1992) found career-change teachers astounded at the difficulties of transforming technical vocational knowledge into lessons accessible to students. Ex-military personnel struggle with school systems less regimented than the military and students who are less manageable (MacDonald et al.,1994).

Unrealized Ideals

People entering teaching from other fields are often stunned by the difficulties of dealing with multiple issues (students, parents and school administrators), deteriorating and inadequate schools resources, and the poor attitudes of students and of their adult colleagues in the field. Those coming out of business are restless and frustrated by what they perceive as the inefficiency of school bureaucracies (Dill, 1990; Feistritzer & Chester, 1996). Time and energy that might be spent on class preparation or on personal and family needs is often diverted to interactions with parents and school personnel (Eifler & Pothoff, 1998).

Finances

Although paying for college is a concern for most students, regardless of age, nontraditional students are often financially responsible for others as well as themselves (Kaswon, 1980). The demands of full-time teaching for preservice teachers often preclude outside work, although at least 65% of nontraditional student teachers work

outside to defray costs (Aslanian, 1996). Additionally, new teachers may experience less salary and a loss of societal prestige as Madfes (1991) found in the Chevron-funded study of 18 mid-life career changers to teaching science and math.

All of the studies summarized in Table 3 have teacher education students as their subjects. The majority of the studies compare differences between traditionally-aged and non-traditionally-aged students. These differences parallel the differences of all non-traditionally aged students, discussed above, no matter what their field of study.

As well as differences, there are also some similarities between younger and older teacher candidates. According to Manos & Kasambira (1998) the hiring rate for most nontraditional students mirrors that of traditional students. Qualities that enhance job placement are the same: minority representation, strong interpersonal skills, knowledge of subject matter, and strong references.

Alternative certification programs

Some ACPs (Alternative Certification Programs) use cohort groups to help nontraditional teacher education students grow into their new roles and combat some of the stress and difficulty inherent in teaching (Dill, 1994; Guyton, Fox, & Sisk, 1991; Sapin-Piane, 1993). This can overcome feelings of isolation. Cohort members can provide empathy, a sense that one is not alone in what can be an overwhelming situation. Working with peers allows interchange of ideas and methodologies that often results in more refined pedagogical skills (Powell, 1992; Sapin-Piane, 1993).

Alternative Certification Programs have evolved over the past 30 years as a response to real and perceived shortages of qualified teachers. The programs offer the

opportunity for individuals to teach without graduating from a traditional teacher-preparation program which includes a degree in education, supervised internships, and acceptable scores on tests of basic skills and pedagogy. Proponents argue that they allow qualified individuals from sectors other than education to bring their skills and experience into the classroom expeditiously. Some proponents also see ACPs as a way to circumvent teacher education programs that may be low quality programs. Opponents wonder how we can discuss improving by increasing teacher quality at the same time that we allow them to teach with less preparation. Opponents also point out that the push from national and state departments of education for alternative certification programs has resulted in programs that are not held to the same academic rigors as university programs (Boyce, 2001). The number of such programs has grown to at least 85 across 40 states, and it is estimated that at least 125,000 people have been certified through these programs (Feistritzer & Chester, 1996). ACPs may be a partial answer to shortages in certain areas. Darling-Hammond, Hudson, and Kirby (1989) reviewed 64 math and science alternative certification programs and found they were successful in increasing minority and female instructors of math and science.

Guyton, Fox, & Sisk (1991), in their comparison of 23 alternatively certified beginning teachers with 26 teachers from traditional programs, found greater commitment to the teaching profession in traditionally trained teachers. This seems to be exactly opposite to the findings of DeBlois (1993) and Walker (1996) in their comparison studies of nontraditional and traditional beginning teachers. They found that the nontraditionals (which alternative certification teacher candidates usually are) were more committed to the profession; they had made major life decisions to teach. Is the

difference related to comparing those nontraditional students enrolled in traditional programs with nontraditional students enrolled in alternative certification programs? If this is the case, then perhaps the greatest commitment to the teaching profession comes from nontraditional students who are trained in traditionally certified teacher preparation programs.

Miller, McKenna, & McKenna (1998) matched 41 alternative certification students with 41 traditionally certified students and found no significant differences after three years classroom experience. The quality of each of the programs is certainly a factor in such a comparison. Most, if not all, alternative certification programs require at least one year of mentored instruction before certification.

Connecting Theory with Practice

Successful teacher education programs that serve nontraditional teacher candidates create close connections between theory and practice. They draw upon adults' life experiences and tie them in with coursework and the classroom. The beginning teachers continue to learn as they are on the job. Teacher education programs that do not do as much of this on-the-job training with a mentor are sometimes criticized as being out-of-touch with school realities (Knauth, 1994). Others take a broader view that the university provides the necessary theoretical base upon which to grow and a bit of idealism as well (Knauth, 1994). On the other hand, college of education personnel have concerns about programs that seem to value field experiences over strong pedagogical and theoretical foundations (Eifler & Potthoff, 1998). It would appear that strong foundations in both pedagogy and content are needed to provide meaningful preparation

and growth for new teachers. If this preparation continues after the undergraduate degree, or alternative professional preparation, is obtained, it will only make stronger teachers for our classrooms. Most student teachers agree that the practicum is the most valuable part of their preservice training. It is there that they begin to make meaning of what they have learned, both in classroom and in life.

Meloy (1992) used two questionnaires to uncover the assumptions of cooperating teachers as related to their nontraditionally aged student teachers. The first questionnaire was open-ended and the second was a ranking based upon the compiled results of the first questionnaire. She concluded that cooperating teachers saw personal characteristics such as personality, hard worker, responsible, fair, flexible, well-organized, optimistic as more important than age or gender. Furthermore, she concluded that enabling preservice teachers to do their best learning required communication that is not based upon prior assumptions about age-related abilities and competencies.

Table 2 displays the studies reviewed of nontraditional students preparing for teacher certification. It is a summary of the studies discussed above.

Table 2: Studies reviewed of nontraditional students preparing for teacher certification

AUTHOR	PARTICIPANTS;METHOD OF GATHERING DATA	INSTRUMENTATION RELIABILITY/VALIDITY	STUDY FOCUS	RESULTS
Bray (1995)	72 el. ed. PSTs (50 Ts & 22 NTs above age of 25); Teacher Concerns Checklist del. Pre- & Post student teaching & individual narrative at middle.	Schipull (1990) tested reliability & validity of the TCC & found it sufficient for research. Reliability by test-retest analysis & validity by Pearson product moment correlations between TCC & the Quality of Teacher Work Life Survey & the Teacher Stress Inventory.	Comparing NTs & Ts in regard to concerns about el. classroom teaching.	Confirmed diffs. In levels of self & task concerns betw. 2 groups. Recommend diverse training for supervision of these students.
Cohen (1982)	17 undergrad ed. majors – 8 Ts & 9 NTs;:Teacher Concerns Checklist & life narrative interview before & after student teaching	Not mentioned; however, validity & reliability of TCC established 8n 1990 (see above).	Diff. in groups re. orientation to profession & career goals.	NTs all planned to stay in field (only 2 Ts). NTs more apprehensive about supervising process & less concerned for self & more for their students.
DeBlois (1993)	392 PSTs (2 NT groups – ages 24-29 (130) & age 30 & up (143). Rest are T.); Questionnaire (at end of student teaching)	None	Developmental differences & expectations, concerns, & attitudes toward teaching.	NTs made a major life decision to teach; NTs has more realistic expectations and stronger self-concepts.

Eifler (1997)	3 case studies of NT undergrads who are career changers: interviews, journals, phone calls, artifacts, observation, & videotape.	Triangulation of multiple data sources	Experiences of NT PSTs in one semester of in a traditional teacher certification program	NTs demonstrated perseverance, flexibility, self-doubt, ability to draw upon life experiences. NTs placed high value on mentorship. Frequent tensions between expectations of cooperating T. & supervisor, & realities of performance. Tended to expect more expertise in pedagogy.
Guyton, Fox, & Sisk (1991)	26 Ts & 23 NTs in ACP (8 wk summer program); EAI (Educational Attitudes Inventory, TAI (Teaching Attitudes Inventory), TES (Teacher Efficacy Scale), beginning teacher evaluation form	EAI – val. .73, split half rel. .89 TAI – val. .82 - .89 alpha TES - .75 - .78 Tchr. Eval. Form - .96 alpha	Comparison of ACP PSTs with traditionally-prepared in attitudes & teaching efficacy	Groups similar on most measures; ACP students supported emotionally & professionally by mentors. Condensed pedagogical prep. & a supervised internship are a reasonable alternative to T tcr. Prep programs for persons with degrees in the subject they will teach. Ts more positive about staying in profession.

Hutchinson & Buschner (1996)	Two NTs (age 30 & 31)in PETE; 3 indepth phenomenological interviews of 90 min. ea. PETE = physical education teacher education	Not mentioned	Life experiences from point of view of two NTs	Life experiences parallel findings in adult learning lit; typically reenter college after life-triggering events, have reservoir of life experiences that they utilize frequently as a resource for learning, learners are self-directed & goal-directed, & have "problem centeredness" approach to learning.
Manos & Kasambira (1998)	290 NT teacher ed students; focus group & survey	None	Needs assessment of NTs to graduate successfully	Descriptions of NT students, similarities & differences with Ts
Meloy (1992)	39 cooperating teachers in 9 schools with student teachers; questionnaire & follow-up questionnaire	Not mentioned	Expectations of cooperating teachers about older student teachers	Communication is required that is <u>not</u> based upon prior assumptions of age-related abilities & competencies. Sts do not bring the same levels of experience, maturity (regardless of age), dedication & skill to st. tching. Personal qualities overshadow.
Metcalf & Kahlich (1998)	18 NT student teachers in secondary education, interviews & written reflections	Not mentioned	Patterns of developmental change	Progression of NTs is quicker & they go through slightly different stages.

Miller & Fraser (1998)	N = 256 for questionnaire survey; survey & 10 semi-structured interviews	Pilot questionnaire survey (N = 101) for construct validity	Attitudes toward teacher training courses	Negative attitudes peaked at ages 31-35, the group with highest proportion of parents, pressures of family commit.
Monthei (1991)	STs (N=207) from four 4-year state higher ed. Institutions in CO. Secondary level (gr. 7-12); 3 survey instruments (researcher developed)	Reliability by test-retest (ranged from .8659 to .9513 on surveys) Validity by expert panel.	Expectations of STng experience of NTs compared with Ts.	Sig. Differences between Ts & NTs at $p<.01$ on all 3 surveys. NTs have lower expectations regarding expectations of professional expertise of supervisor & coop. T, higher expectations of STs role
Powell (1992)	25 NT & 17 T student teachers; interviews , recall of peer lessons, & concept maps	Multiple sources: Triangulation of data	Influence of prior experiences on pedagogical constructs of T & NT student teacher	Different educational experiences may be needed to prepare T & NT preservice teachers.
Rodriguez & Sjostrom (1998)	45 PSTs (18 NTs); observations, interviews & 5 reflections followed by 10 minute interview	Multiple sources: Triangulation of data	Professional beliefs & teaching behavior	NTs possibly capable of being more effective beginning teachers; cooperating teachers express comfort in turning over class sooner.

Walker (1996)	4 case studies of NT teachers in first year of teaching, interviews, observations, document analysis	Multiple data sources; triangulation	NT teachers in first year of teaching	NTs focus on children first year. Committed to profession. Ts focus on survival problems; indecision over remaining in profession.

Abbreviations used in tables: *NT = nontraditional students (older); T = traditional students, under age 25; AC = alternative certification programs and students; TC = traditional certification programs and students; PST = preservice teachers*

Bringing Life History Narratives into the Classroom

Narratives are stories. Because we are instinctive story-tellers, this is a way of knowing and of making meaning for our lives. The construction of stories is an on-going part of our lives. Journals and diaries are a dialogue with the self and are found to be a vehicle of personal growth. Learning journals are used by learners to examine both the process and the content of their learning (Clark, 2001; Kerka, 1996).

The very act of telling or writing the story of one's development actually furthers development (Clandinin & Connelly, 1986). It enables the person to step back from it, to reflect on it, and to make choices about how to interpret it and how to change it. To be the teller or author of a story is to have authority over it - to choose what and how to tell it. This makes the telling of the self-narrative empowering and potentially transformative. Perspective transformation culminates in action and a changed way of being in the world. Mezirow has said that a "strong case can be made for calling perspective transformation the central process of adult development" (p. 155). It is the life narrative.

The studies reviewed were all qualitative. They used life histories and autobiographical accounts as a primary source of data to learn about teachers and teacher education. Three of the studies looked at traditionally aged students (Britzman, 1985; Crow, 1987; Schoonmaker, 2002). Three looked at a mix of ages (Knowles,1992; Powell 1992 & 1992a). The final four looked at mature aged participants (Bullough & Knowles,1990; Crow, Levine, & Nager, 1990; Duncan,2000; Novak & Knowles,1992).

Most of the participants of the mixed ages and the mature-aged cohorts were career changers. Crow, Levine & Nager (1990) conducted small group interviews with

3-5 students who were career changers from business and then followed with the whole group of thirteen to check and expand the information. Finally they conducted individual interviews. They proposed to discover the meanings of career change. They grouped their data into *initiating influences* (need to do more fulfilling work, major life change, unhappiness with previous job), *mediating experiences* (new role as novice, gap between job needs & previous knowledge, impatience or respect with learning), & *commitment* (teaching as a deliberate choice or disenchantment). Some students encountered teachers who were suspicious of their interest in applying knowledge and skills acquired in previous occupations. Crow, Levine, & Nager (1990) concluded that there is a need to prepare both groups for better communication across the line between education and business. Analysis of this data led the researchers to group the career changers into the converted and unconverted. The unconverted would not stay in the field of teaching.

Bullough & Knowles studied one career-changer who was a 37-year-old beginning secondary teacher who struggled in his first year of teaching but was offered no mentor and very little substantive help to develop a teaching style that was consistent with his philosophy. This case study included interviews held every three weeks for a year, classroom observations, and documents (journal and planning records). One of the conclusions was that there is a tendency to withhold assistance from older, more mature beginning teachers, believing they do not need or want it.

There are three doctoral dissertation studies in this group of ten studies: Britzman (1985), Crow (1987), and Duncan (2000). Britzman and Crow both studied traditionally-aged students who were secondary pre-service teachers. They came from a sociological perspective, focusing upon the socialization of teachers and how life

experiences influences their teaching. Both found that biography informed pedagogical decisions. Crow's work, in fact, led to theory that teacher role identity is primarily influenced by memories of biographical history.

Duncan, for her doctoral dissertation, studied twenty-three women students aged 25-45 over the period of a year to learn the processes of change and adaptation of students as they learn to become student teachers. The women used various coping strategies to deal with family and academic pressures which Duncan called the "uneasy blend of struggle, contestation, guilt and success which became a daily feature of their lives as mothers, wives and full-time student teachers" (Duncan 2000, p. 459). . Duncan compiled these stories into a book on the life stories of mature entrants to teaching (Duncan (2000).

Schoonmaker (2002) also published a book as a result of her case study, a ten year longitudinal study of one person becoming an elementary school teacher, beginning at the traditional age. Her study was based upon interviews, observations, and documents. Her conclusion was that developing teachers construct a personal theory out of a dialectic between personal knowledge, teacher education knowledge, and practical experience. She recommends that teacher's prior experiences be brought to the surface and reconstructed, rather than being suppressed and then acting as obstacles.

Powell (1992) in his study examining the influences of prior experiences on pre-service teachers' personal constructs of teaching and the effects of that on pedagogical development concluded that nontraditional student teachers pedagogical constructs varied in important ways. In fact, Powell says, "Different teacher education experiences, therefore, may be needed to prepare traditional and nontraditional preservice teachers"

(Powell, p. 236). He references four programs that are university-based teacher education curricular models for nontraditional students (Bennett, 1991; Hawk & Schmidt, 1989; Noordhoff & Kleinfeld, 1990; Powell, 1990).He is cited as one of the authors of such a program.

In addition to traditional interviews, Powell used concept maps and stimulated recall interviews (described in chapter 3) with his alternative certification program participants as a rather unusual way to determine the influence of prior personal constructs of teaching and how these experiences further pedagogic development. Concept maps are graphic organizers that display how the student is perceiving pedagogical constructs. He trained participants in the development of the concept maps and then asked them to make one before and after their teacher training (Powell, 1992 & 1992a). From this information Powell created schemata development stages based on trends of pedagogical knowledge acquisition and use. The four stages are:

(1) Atheoretical schemata (before methods classes), (2) Theoretical schemata (after methods classes) (3) Integrated schemata (during student teaching), (4) Practical schemata (after student teaching). He concluded that both coursework and supervised field experiences are important to understanding classroom dynamics and the learner's needs. Additionally, Powell notes that prior life experience and knowledge illustrates, vitalizes, and tests the theoretical principles of teaching that are included in most teacher education programs. He feels that the curriculum in teacher education programs should acknowledge and account for perservice teacher's personal practical experience and knowledge. Both of these studies included checks for reliability. In one (1992) he and a

graduate assistant individually coded the data. Intercoder agreement on various sections ranged from .82 to .89.

Novak & Knowles (1992) interviewed and observed four beginning elementary second career teachers, aged 27-42, who were teaching grades 4 and 5. They also studied five young beginning teachers in secondary schools. They focused on the influences of prior life and employment history on the thinking and practice of these beginning teachers. They found that prior experiences influenced organizational and management structures, and expectations of and beliefs about children, curriculum design, and resolution of instructional problems as well as views held of themselves as teachers.

One of the early teacher preparation programs specifically established for second-career teachers, and still operating, is the Midcareer Mathematics and Science Program at the Harvard Graduate School of Education. These career changers were found to exhibit four motivations: "the need to engage in a 'worthwhile activity', a notion of service to others, personal style, and a love of the subject" (Merseth & Beals, 1991, p. 10). Crow et al. (1990) would group these motivations under 'initiating influences'.

It seems clear, from the literature, scant as it is, and from common sense observation, that prior life experience most certainly influences the perspectives of prospective teachers. Yet, for the most part, teacher education programs do not seriously consider nor facilitate exploration by these preservice teachers of their prior experiences as they influence practice. There seems to be little evidence that professors of teacher education tap into these experiences or induce them to reflect about these prior experiences in other than superficial ways. Yet personal reflection is encouraged.

Table 3: Studies reviewed of research focusing on autobiographical and life histories in teacher education

AUTHOR	PARTICIPANTS; METHOD OF GATHERING DATA	INSTRUMENTATION RELIABILITY & VALIDITY	STUDY FOCUS	RESULTS
Britzman (1985) DD	2 secondary PSTs (not NTs): ethnographic study, interviews, observations & documents	Triangulation	Socialization of PSTs & critical theory	Biography informed pedagogical decisions. Lacked critical understanding to analyze & transform how their circumstances shaped them & how they shaped their circumstances.
Bullough & Knowles (1990)	Case study of 37 yr. old beginning secondary teacher; interviews (every 3 wks. for 1st year) classroom observations, documents (journals & planning records)	Triangulation	Experience of one career-changer who struggles in first year as teacher.	There is a tendency to withhold assistance from older, more mature beginning teachers, believing they do not need or want it.
Crow (1987) DD	4 secondary ed. PSTs, cooperating teachers & university supervisors; shadowing, interviews, documents	Triangulation	Socialization of PSTs during teacher ed. program, teacher role identity.	Tension betw. official & unofficial curriculum. Failure to link theory & practice resulted in 2 PSTs leaving program.

Crow, Levine, & Nager (1990)	13 career changers (age 24-43); small group interviews with 3-5 students followed by whole group of 13 to check & expand info, then individual interviews.	Triangulation	Meanings of the career change	Data grouped into: *initiating influences* (need to do more fulfilling work, major life change, unhappiness with previous job, stepping to something else), *mediating experiences* (new role as novice, gap betw. job needs & previous knowledge, impatience or respect with learning), & *commitment* (tchg as a deliberate choice or disenchantment).
Duncan (2000)	23 women students aged 25-45 in 1st yr. of 4 yr. T training; four one-hr. interviews over year's time	Triangulation Respondent validation	The processes of change & adaptation of students as they learn to become student teachers	Women used various coping strategies to deal with family commitment & academic pressures. Researcher published a book on life stories of mature entrants to teaching.
Knowles (1992)	5 case studies of secondary PSTs; interviews, observations, documents.	Triangulation	Connection between biographies and how STs think about teaching & practice.	"Biographical Transformation Model"- Early experiences strongly influence schemata & framework for action.
Novak & Knowles (1992)	4 beginning el. second-career tchrs, females aged 27-42, tchg gr. 4 & 5 & five young teachers in secondary schools; observations, journals, interviews.	Triangulation	The influences of prior life & employment history on the thinking & practice of beginning, second-career elementary & secondary school tchrs.	Prior experiences influenced organizational & management structures, expectations of & beliefs about children, curriculum design, & resolution of instructional problems as well as views held of selves as teachers.

Powell (1992)	25 NTs & 17 Ts; autobiographical interviews, concept maps, stimulated recall interviews	Author & grad. Asst. individually coded – inter-coder agreement on various sections ranged from .82 to .89 Triangulation	The influence of prior on PSTs personal constructs of teaching, & to consider how those experiences further pedagogic development	Data analysis yielded 4 categories & 13 subcategories of prior experiences. Prior life experience knowledge illustrates, vitalizes, & tests the theoretical principles of teaching that are included in most tchr. Ed. programs. Curriculum should acknowledge & account for PSTs personal practical experience & knowledge
Powell (1992a)	16 grad-level PSTs; in an ACP; 4 concept maps (over 12 mos.) & 4 videotapes followed by stimulated recall interviews	Constant comparative method of data analysis Peer debriefing with director of ACP Triangulation	Kinds of pedagogical knowledge that one cohort of career changer PSTs acquired & used.	Schemata development stages 1. Atheoretical schemata 2. Theoretical schemata 3. Integrated schemata 4. Practical schemata Coursework & supervised field experiences both important.
Schoonmaker (2002)	Ten-yr longitudinal study, begins with PST year; interviews, obs., documents	Triangulation	Personal knowledge translated into professional practice	Tchrs. Construct personal theory out of a dialectic betw. personal knowledge, teacher educ. knowledge, & practical experience. Tchrs prior experiences can be brought to the surface & reconstructed, rather than suppressed as an obstacle.

Note: NT – nontraditional student; T – traditional student; PST – preservice teacher; ACP – alternative certification program
DD – doctoral dissertation

Novak & Knowles (1992) "maintain that there is an urgent need for a better understanding of the impact of life experiences on the developing teacher as well as a need for the development and subsequent evaluation of teacher preparation programs which promote the kind of thinking necessary to assist career changers examine and utilize their previous life and career experiences to enhance their classroom teaching "(p. 34).

Conclusions

Many of the studies, discussed above and summarized in the tables, compare nontraditionally aged teacher education students with traditionally aged students. Nontraditional students are compared with traditional students in several ways in these studies: study and learning strategies (Devlin, 1996); psychological differences (Haipt, 1990); developmental differences (De Blois, 1993; Metcalf & Kahlich, 1998); professional beliefs and teaching behaviors (Rodriguez & Sjostrom, 1998); and assessment of needs (Manos & Kasambira, 1998). All of the researchers are teacher educators. Most are explicit in the purposes of their research. They see an increasing number of nontraditional students in their colleges and universities. They want to better understand these students and their needs, and how they can better serve them in teacher preparation.

Most are not, however, explicit in their assumptions and biases and they are not always forthcoming about the possibility that the research may be influenced by their own expectations. It may be that the participants know they are being studied and will

rise to meet the expectations of their researchers. It is refreshing when researchers and teachers examine their own practice and research in a more reflective way.

Who are the people who are the participants in these research studies? Mostly they are the students in teacher education programs. Only one study looks beyond the students, whether they are student teachers or beginning teachers. Meloy (1992), in her study of expectations about mature students becoming teachers, goes to the cooperating teachers with whom the students are placed to seek information. Oddly though, the title of her article from the journal Teaching Education is *Perceptions of the Non-traditional Student Teacher: Older and Wiser?* The study is not about the perceptions of the student teachers, but about the expectations of the cooperating teachers. It may be a misleading choice of title, but the thoughts of the cooperating teachers and mentors of beginning teachers are certainly worth exploring.

Few investigators have considered alternative explanations for their observations. Three of the quantitative studies did (Devlin, 1996; Miller et al., 1998; Haipt, 1990). Qualitative studies, on the other hand, often provide rich and complex narrative accounts, which can provide great detail and insight into phenomena that are being studied, particularly when that phenomenon relates to life histories. However, qualitative researchers need to be scrupulous about stating the biases and assumptions of the researchers and they need to be reflective in questioning the conclusions that they make from the data. One way to provide balance is to use several sources of information; to triangulate the data. Most, if not all, of the qualitative studies did this. Walker (1996) for example, used interviews, observations, and document analysis in her doctoral dissertation. Rodriquez & Sjostrom (1998) gathered data using observations, interviews,

and achievement tests. Powell (1992), in addition to interviews, used concept maps and recall of peer lessons to enable him to explore the relationship between preservice teachers' prior experiences and their implicit theories of classroom practice, and to relate prior experiences to thinking about teaching.

Most of the studies have cited the need for more research in this area. Most have also recognized that the influx of new older adults into teacher education (Bray, 1995) has underlined the need to better understand and serve this promising population.

CHAPTER 3

RESEARCH DESIGN & METHODOLOGY

"...teachers bring their entire autobiographies with them: their experiences, identities, values, beliefs, attitudes, hang-ups, biases, wishes, dreams, and hopes. It is useless for them to deny this; the most they can do is acknowledge how these may either get in the way of, or enhance, their work with students." Sonia Nieto

Introduction

The purpose of this research is to learn more about how the life and job experiences of mature-aged teacher education students affect their professional preparation. In 2002 I conducted a qualitative pilot study with a group of five student teachers, aged 31-45 (Klausewitz, 2002). These mature students were at a different place developmentally from their younger classmates. They had already experienced so much of life including jobs, marriage, parenthood, and travel. They were returning to college, usually because of a life decision, and they were career-focused and serious about their goals. They often challenged and questioned the instructors (Carney-Crompton & Tan, 2002; Deblois, 1993; Eifler & Pothoff, 1998; Justice, 2001; Klausewitz, 2002). Knowles (1980) described nontraditional adult learners as more self-assured in their ability to work with colleagues and administrators. They may have experiences with schools as parents, as teacher's aides, or PTA committee members. Their expectations about the nature of schools and teaching are often realistic and based upon their own experiences (DeBlois, 1993). Due to the life experiences already accumulated, older students are seen to be especially desirable as future teachers.

As we have seen, there is a considerable body of literature about nontraditional college students, much of it comparing nontraditional students with traditional students.

There is much less research about nontraditional college students pursuing teacher education certification and even less about nontraditional college students pursuing teacher certification within traditional *elementary education* programs.

Overall Approach and Research Design

A qualitative research design was selected because this yielded the in-depth information about these students required for this research. The work was primarily naturalistic qualitative inquiry. Rather than gathering data in a laboratory or through a mailed questionnaire, this data was gathered from participants in the setting in which they work, their 'natural' settings. Qualitative inquiry seeks to understand "how people make sense of their worlds through multiple methods that are interactive and humanistic: talking, looking, listening, and reading" (Rossman & Rallis, 1998, p. 8). These are the techniques of interviewing, observing, and gathering documents. The procedure is outlined in the Research Flow Chart (Appendix A). This work could also be called an 'opportunistic case study sample'; opportunistic because the participants were volunteers defining themselves as fitting certain criteria.

Data were collected and analyzed using a variety of qualitative research techniques. Among the techniques used were observation, document analysis, stimulated recall using videotaped classes and interviews. Field notes were recorded during and after observations and a summary statement was written each day after data collection.

First, biographical data was gathered about the participant's lives and careers. Using the complex concept of the life of the teacher as the central source of educational practice, researchers make convincing arguments for the use of life histories in studying

teacher thinking and decision making (Pinar, 1981; Butt, Raymond, & Yamagishi, 1988; King & Franklin, 1989). Pinar (1981) concludes his article on life history and educational experience, saying, "Only as I comprehend the relations among my life history, my biographic present and my intellectual works, am I engaged in educational work."

Butt et al. (1988) present some of the underlying assumptions of the life history approach. Chief among them is that the teacher is the major player in the classroom, making decisions that influence curriculum content, pedagogy, and change. The teacher possesses knowledge built upon life's experiences, personal, practical, and professional. Theory and practice merge in the classroom. In order to facilitate change and reform it is important to understand how teachers experience their working realities, how they act in their classrooms, and how they got to be that way. The approach, which facilitates this type of inquiry, is biographical in character.

King & Franklin (1989) in their portrait of the lives of two pre-service teachers attempt to illustrate how the school and life experiences of a person, and his or her responses to those experiences, are put together to form a world outlook which is unique to each individual.

What teachers know and how they use that knowledge in their classrooms is a relatively recent focus of research. Shulman (1986) asked important questions such as "Where do teacher explanations come from? How do teachers decide what to teach, how to represent it and how to deal with problems of misunderstanding?" (p. 8) Educational researchers have studied teachers' classroom images (Clandinin, 1985), the experience of classroom cycles and rhythms (Clandinin & Connelly, 1986), subject matter expertise

(Leinhardt & Smith, 1985), and pedagogical-content knowledge (Grossman, 1989; Gudmundsdottir & Kristjandottir, 1989). The present study examines the experiences of five student teachers employed in acquiring the skills necessary for professional practice and the presumed sources of some of that knowledge.

Selection of Participants

Student teachers were purposefully selected from a pool of mature age (over the age of 30) student teachers, graduate (four) and undergraduate (one), doing their student teaching in elementary classrooms during the time planned for this research. All are seeking certification to teach.

Student teachers who fit the parameters of the research were sent, through the mail, an invitation to participate (see Appendix C). This invitation contained information about the research and what it involved, should they choose to participate. An initial questionnaire was included to return if they chose to participate. This questionnaire served the further purpose of gathering contact information such as phone numbers and best time to call so that an introductory meeting could be set up with the volunteers. On top was an introductory cover letter from the administrator of the student teaching program. Stamped, self-addressed envelopes to return the initial questionnaire were included with each invitation.

Because only two invitations were returned through the mail, I did attend one of the student teacher seminars to seek recruits. I found two more this way but one had to be disqualified. So I had three firmly committed volunteers from the state college.

I was disappointed because I had been led to believe that there were many more who qualified than there actually were. Another factor is the uncertainty that students feel as they begin their student teaching and the already great time commitment. Since I hoped to have five participants for the research, I turned to a private college to seek additional participants. Only two fit the qualifications and so I called each and arranged a meeting with them in which I explained my research and asked if they would like to participate. Fortunately they both agreed. My feeling was that they would be very good participants because both were excellent students who had well-developed communication skills. All five participants, three from the state college and two from the private college, stayed with this project until the completion of the research.

The field of elementary education is dominated by women: 83.3% of elementary teachers are female (U.S. Census Bureau, 1997). And so the small sample in this research, with four females and one male, mirrors the larger population of elementary teachers by gender.

This study explored the experiences of these students engaged in one full semester of student teaching, which served to provide an identifiable beginning and end for this investigation. These students were teaching under the supervision of cooperating teachers and university instructors. Pseudonyms have been used to conceal the identity of the participants, their cooperating teachers and the identity of the schools.

Participants

The initial interviews, Rainbow of Life Roles, and initial questionnaire began to build a portrait of each of the participants, their family of origin and their present family,

their activities, and their travel experiences. Through their words we can begin to see the influences of their individual journeys.

Each participant is unique and together they bring an array of life experiences to this research. They do have several things in common, aside from the fact that they are all student teaching in elementary schools this semester and all are above the age of thirty and all are participating in this research. Each is married. Each has had other jobs outside of the home, previous to teaching. Each has a working supportive spouse. They each have children. In a list of values, each participant ranked 'family' as their top priority. David has three children, two boys and a girl. The other participants each have a boy and girl. The children range in age from five to 16 with an average age of 11. The participants themselves range in age from 38 to 45. Each comes from a relatively large family of origin, with four to six children in each family. None are from a minority culture.

Each participant volunteered that they enjoy reading for pleasure as well as enlightenment. Each has done at least some traveling to different environments both inside and outside the United States.

Adults spend much of their adult life trying to understand themselves, and this process for those in social professions such as nursing, teaching, or social work requires a deep self-knowledge. "Traveling, living in another country, changing jobs, enrolling in continuing education all are different ways of finding identity and coming to self-understanding." (Dominice, 2000, p. 81)

A short description of each participant is available for reference in Appendix G and Table 4 contains a summary of the birth family of each participant. Participants are in alphabetical order.

Table 4: Birth family of participants

Name	**Siblings, B–brother S–sister**	**Mother's Education & Occupation**	**Father's Education & Occupation**
Ann*	S me S,B,S,B	Some college (cook in local café)	High school (retired AF)
David	me B,S,B	High school (convent for one year)	Master's plus (school administrator)
Diane	S 2 B me	Two year college (sold clothing line at home)	Four year college (lumber broker)
Kathy	S B me S, 2B	Some college (nurse)	High school (various)
Suzanne	B 2 S me	Four year college (history teacher) some grad. Real estate broker now.	Graduate Level - DVM (veterinarian)

A description of each participant follows, in alphabetical order as above. Each begins with a short physical description, some things about their current family situation, jobs they have held and finally their decision to teach.

Ann

Ann was on active duty in the Air Force before her two children were born. Slender and presenting a tailored appearance, one can easily imagine her in a uniform. During the time of this research she was living at a nearby military base. Ann was the only undergraduate of the participants. Her husband retired from the military just as she was completing her student teaching. Immediately following her graduation ceremony she and her family drove to their new location in the Southwest where her husband already had a civil service job waiting for him.

Ann is the second of six children born to an Air Force family who moved frequently after she was born but then spent a longer time in a Midwest town where she grew up and received her schooling from sixth grade, when they moved there, through high school. In the Air Force Ann was a pharmacy technician. When she began college her children were aged 4 and 6. Ann graduated this month; they are now 11 and 13. She loved science and health care and decided to become a dental hygienist but this did not happen.

Moving around as military families do and spending some time overseas made it difficult to complete a four-year course of higher education. The last move that she made took her to a place where the wait to be admitted to the dental hygiene program was a year. She wanted to complete her four-year degree and knew just how much time she had to do it. So she changed her plans to get a degree with a double major in English and Education. She avoided science classes, though she loves science, because each had a lab, requiring more time away from her family.

David

David, a student teacher whose colleagues hold him in high regard, is a career changer. He is age 45, medium height, light brown hair, and presents a pleasant, well-kept appearance. His preferred outfit for student teaching was a turtleneck and a sports jacket. He speaks easily and confidently. He was a successful businessman, leaving a promising career first in utilities and then in a software start-up company. Given the barriers that have to be crossed and the reduction of income to become a teacher it makes one wonder 'why?'

On his 40th birthday David asked himself if business was a good place to be putting his time and energy. He made the decision at this time to go back to school and become a teacher. He said, "It was more than a career decision, it's kind of a vocation, but also a life decision to balance things in my life as well." In teaching David felt that he had an opportunity to live his values. That was his stated primary reason, but a background reason was his father. His father, now retired, was a high school principal for over forty years. As Dave was growing up, the talk around the family's dinner table was often about schools.

His Rainbow of Life Roles was more complex than the others even though he has worked at only two jobsites since graduating from college 23 years ago. Each arc had, not one, but several areas colored dark for periods of intensity. So there are notes about the meaning of each area of darkness all over his Rainbow.

In his application to enter the Master's Degree program in Education Dave wrote, "In examining where I find the most personal satisfaction, I have discovered that it is when I am working with children. I have three children, ages 16, 15, and 10 who have

given me years of joy. My greatest rewards are when I am helping them to develop, to learn and to grow. For the past seven years, my work with children has extended to coaching local sport teams. In addition, last year I began teaching a ninth grade class in religious education for my local parish. With my own children and with others, I have seen the positive impacts that caring and competent educators can have."

Diane

Diane has very curly shoulder length dark brown hair, eyeglasses, and an easy smile. Diane talks easily and is quite open and friendly. At first meeting, there was nothing that particularly stood out about her but that changed when she began to talk. It became apparent that she is a thoughtful, warm, and interesting person who believes in community service. A frequent volunteer at her children's school, she is also a Girl Scout troop leader and a member of the Parks and Recreation Commission for her town.

Diane went to college at a large state university and earned her Baccalaureate degree in English and Journalism. She has one more course to complete her Master's Degree in Education.

Diane has traveled extensively with her husband, also an editor and a writer. This travel mostly took place before the children, now 10 and 8 years, were born. She said that when the children were young "there were a couple of [periods] that were really tough." As a writer/editor for an outdoors magazine, her husband has written numerous articles about interesting places. They met in college where both were journalism/English majors. He just published his second outdoor adventure book.

Diane's jobs until now have all had to do with editorial work. For the past ten years she has been a freelance production editor with two different prestigious publishers of educational materials. This brought her into contact with educators and their writing. The more she read the more she decided that she would like to be the one in the classroom instead of just reading about it. Now she hopes to become a classroom teacher or a curriculum specialist in literacy.

Kathy

Kathy is tall slender with light brown short hair. During the time of the research Kathy's hair became shorter and shorter. By the last interview it was quite short and she invoked thoughts of movie star Jamie Lee Curtis. In fact, as she was bending over to check the wiring of her VCR at her home a tattoo was visible on her lower back. She said that on her 40th birthday she and a girlfriend decided to get tattoos and that at first her husband didn't think it was real. Her children loved it.

Kathy is proud that her finished basement is invaded frequently by her son's rock band. The basement is equipped with a drum set, microphones, and a speaker system. Kathy likes talking to her two sisters on the phone, reading, gardening, and watching videos that are "a little off the beaten track."

Kathy speaks slowly and thoughtfully. In the classroom this trait gives students time to process information. Her supervisor said that she ought to step it up a bit. She is trying to find the balance between thoughtful teaching with adequate response time and the stimulation of a fast paced lesson.

For the past five years she has been a part-time librarian at the elementary school where she has been working for seven years. She has also done substitute teaching and worked as an aide there. She has been working at this school since her youngest was in first grade. Kathy observed that some teachers seem to habitually yell at the children all day and others do not. She has noticed that other teachers do not seem to *need* to yell. She feels that, with some, it must be habit.

Her years in the library have taught her some characteristics of teachers that she does not want to develop. She feels that some teachers are disrespectful of her position in the library. They send a child down to get a book while she is in the middle of working with a class. She feels that she will have more respect as a classroom teacher and that she, from her experience working in the library, will have more respect for the paraprofessionals and teacher assistants in schools. Her work in the library and with her own children led to the desire to teach.

Suzanne

Suzanne, an attractive person, is average height with light brown hair turned under in a 'bobbed' style. Like David, Suzanne is a career-changer from the business world. She used to plan conferences for a software company.

Two things were surprising about Suzanne. First. Coming from two generations of veterinarians and knowing that she has been working in marketing, it was rather surprising to learn that in college Suzanne's majors were Government and German. She spent her junior year at the University of Hamburg. She says that she hopes that she does

not regret, at some future date, that she did not become a veterinarian as her father and grandfather did.

Second. Suzanne was a competitive ski racing coach. The children that Suzanne coached were 8, 9, and 10 years old. She did this for eight years after college. She met her husband in college when he was ski racing for the opposing team. Every weekend all winter her family, which now includes daughter, age 7 and son, age 5, heads for the slopes of New Hampshire where they own a condo. Her daughter does ski racing now.

One thing that Suzanne mentioned three times in the first interview about herself and her family was that she was given an unusual amount of responsibility at a very young age. From the time she was about ten years old she helped out in her father's veterinary practice when she wasn't in school. She took care of the animals, helped her father do exams and did lab work and things like that. The family lived on a farm then and she helped to take care of the animals. When she was older she was also a lifeguard. She commented, "We were expected to be responsible." Personal attributes such as work habits established as a young child stay with the adult teacher.

Suzanne became interested in becoming a teacher through working with her own children who are now 5 and 7 years old. She sees advantages in having the same daily schedule as her children do. Suzanne said that going into teaching probably had a lot to do with her mother, who taught high school history. The pivotal time for this decision to go into teaching was after September 11, 2001 when national events impacted her company, which planned conferences and seminars for the software industry. People didn't want to travel so 40% of the company employees were laid off. Suzanne was part time and all part time employees were laid off.

Setting

The settings for the on-site research were public elementary schools in New England. The choice of schools was based upon the assignment of each of the five participants who volunteered for the research. The schools ranged in size from 260 to 460 students. Four schools contained grades kindergarten through grade five and one was preschool through grade 2. Three were older two story brick buildings built in the first half of the twentieth century. One was a newer school with a recent addition and one was built just last year. The student teachers were assigned to grade 1 (2), grade 2, grade 4/5, and grade 5. This information is summarized in Table 5.

Interviews were conducted at various sites agreed upon by the participant and researcher. Libraries and large chain bookstores with private reading areas were frequently used. When a television was needed for the second interview college classrooms were used with three participants and homes for the other two.

Table 5: Settings of student teaching field experience

Name	School	Student Teach Grade	School enrollment & grades	Age of School	School Location	Comments
Ann	Roseville Elem.	Gr. 1	260 K-5	Older school, 2 story brick	Suburban population, thickly settled, older homes	
David	Plain View Elem.	Gr 5		2002	Open sparsely settled area with many new large upscale homes being built	School is already overcrowded requiring re-districting. There are 4-5 classes at each grade level. Area has large homes (attracting families with children) and is rapidly developing.
Diane	Beach Cove Elem.	Gr. 1	460 K-5	Newer school Recent addition	Thickly settled area in prosperous beachfront community	
Kathy	Sea View Elem.	Gr. 4/5	427 K-5	1915, renovated 1996	Urban setting in diverse coastal community	Year-round school. 6 or 7 grading periods with one- or two week vacations. Closed in August. Science-technology magnet school: 140 networked computers in school. Science Discover Center with full-time specialist who teaches science. Multi-age groupings, cluster approach to ESL, integrated curriculum, parent center, Friday morning plan (volunteers teach & all teachers have time to meet).
Suzanne	Road's End Elem.	Gr. 2	280 PS – Gr. 2	Older school, 2 story brick	Thickly settled suburban at end of road, prosperous community	Optional enrollment. Interdisciplinary thematic approach.

Data Collection

Each participant was asked to read and sign a statement of Informed Consent (Appendix B). This statement and all accompanying required materials was approved first by the Human Subjects Review Committee at the university of the doctoral student doing the research and at the colleges of the participants in the study. These reviews are meant to assure that participation in research is voluntary, that voluntary participation is based on being informed, and that the researcher is guarding against making participants vulnerable (Seidman, 1998). All data was completely confidential and pseudonyms were used in this study for all names of people and institutions. Data storage is on my personal computer; no connection may be made between the data and the actual participants.

After participants were selected, the researcher met with them, collectively, and in some cases individually, to further explain the research and to answer any questions they may have about it. They were then asked to fill out the demographic questionnaire (described below). Participants were given copies of the Rainbow of Life Roles (description below) to fill out at home. They were given a stamped self-addressed envelope to return the 'rainbow' to the researcher and a small box of colored pencils with which to complete the rainbow. The colored pencils were theirs to keep. The information from these documents formed the basis of the questions for the first interview. The primary focus of that interview was biographical.

Demographic Questionnaire (see Appendix D) & Initial Meeting of Participants

Each selected participant was asked to fill out a demographic questionnaire to gather information regarding age, living arrangements, family, employment, schools attended, education courses taken, educational levels & occupations of parents, and ultimate personal career goals. This information complemented the information that emerged in the Rainbow of Life Roles and in the first interview about life history such as names of school, family members, and places of employment, and, as another source, it served to strengthen the reliability of the information. After the demographic questionnaire was completed, participants were given a short tutorial on how to fill out the 'Rainbow of Life'. After some discussion and a practice session participants were given copies (extra practice sheets included) to complete at home.

Rainbow of Life Roles (See Appendix E)

Developed by Donald E. Super (1980, 1990) for career counseling and then further tested and enhanced by Super and others (Cook, 1994; Nevill & Super, 1986; Super et al., 1992; and Super et al., 1996), the Life-Career Rainbow presents a means of conceptualizing the complexity of a person's life and career. It graphically portrays the overlapping and temporal roles in one's life, which emotionally increase and diminish as they interact with other roles. These roles include those of child, student, worker, spouse, parent, and a host of others relating to what Super calls the "theatre" of home, school, community, and workplace. There may be other theaters that are important in people's lives such as churches or clubs, just as there may be other roles such as retiree, or "leisurite" (Super's term). Some roles begin early in life (child) while others begin later

(retiree). A single role, such as that of 'child', may fluctuate in intensity, obviously intense in childhood, then diminishing, and then potentially becoming intense once again if the child becomes the caretaker of aging parents.

The participants filling out their own personal rainbows will use colored pencils; the more emotionally invested times will be marked by darkness or intensity of color. Super's tool has been used to encourage clients to think about the future and to career plan, for example 5-10 years ahead (Okocha, 1998). For this research, however, all roles will end at the current age of the participant, since our purpose is not to predict, but to conceptualize how their various life roles and experiences interact with their current clinical teaching practice as student teachers.

Super (1980) said that "The fact that, willy nilly, people play several roles simultaneously during the same day, month, and life stage, in several theaters, means that occupation, family, community, and leisure roles have impact on each other". He theorized that playing a number of roles simultaneously would result in role conflict so that commitment to one role makes it difficult to do justice to another. He noted that a number of studies support this hypothesis. Alternatively, he hypothesized that "the greater the number of simultaneous roles played by the individual at any one life stage, the richer and more satisfying would be the life-style and the greater the likelihood of playing later roles successfully and with satisfaction." (Super, 1980, p. 287).

Role salience, or the importance an individual attaches to each of these life roles, was added in later uses of the rainbow. A standardized assessment tool for measuring role salience was developed by Nevill and Super (1986). This will not be used here. Instead, role salience will be loosely indicated by the intensity of color in the rainbow.

Interviews

Three semi-structured interviews of each student participant combined open-ended inquiry, which allows teachers to describe events in their own words, and focused questions that are gleaned from previous interviews and from documents and classroom observations. Spradley's (1979,p. 11) advice is 'before you impose your theories on the people you study, find out how these people define the world.' What is their schema? The idea was to elicit their 'stories' with as few interruptions as possible. Apart from the opening questions, the researcher's role was primarily one of probing and prompting: 'Can you explain that a little more?' 'Is there anything else you would like to say?' 'Can you give me more detail?' The key questions for each interview can be seen in Appendix F. Video taped lessons were utilized to stimulate recall of classroom actions and decisions in the second interview.

There were three interviews of each student participant.

1. *Interview 1* was autobiographical in nature and took about 90 minutes. The Demographic Questionnaire and the Rainbow of Life Roles were the centerpieces of this interview. This was an in-depth interview that allowed the researcher to find out about things that are not directly observable, such as personal history, meaning making (interpreting experiences), and feelings.

2. *Interview 2* focused upon the classroom. It included discussion of classroom observations and observation of videotape, intended to stimulate recall of why

certain activities were chosen or certain decisions were made (Borko et al., 1988; Calderhead, 1981). Participants were asked to pause the video whenever they remember what they were thinking at the time. Participants were more in control of the video (and this particular interview) than the researcher because selecting sections would allow researcher bias to surface. Estimated time for this interview was also 90 minutes.

Because of the need to get classroom observations in before the student teaching was over, the second interview was suspended until both videotaped lessons were completed. Therefore, since there was a need, for this interview, to find a quiet location with a TV and VCR, both videotaped segments were viewed at the same time for all but one participant. Two separate interviews with videotape viewing were required for the last participant, due to personal time constraints with the second interview.

3. *Interview 3* was held toward the end of the semester, after the students had completed their practicum experience. The primary purpose of this interview was to recap all that had previously transpired and to reflect back upon the student teaching experience. Prior to this interview it was necessary to thoroughly examine all previously collected information to formulate final questions. This interview, like the first two, took about 90 minutes. It included watching the video to stimulate recall of action and decision-making for only the final participant. All participants agreed that I could phone or e-mail them with additional questions and clarification as needed and to send each of them all

transcriptions and interpretation of data about them so they could correct any discrepancies.

Observations

There were three classroom observations done throughout the practicum. The first one was after the student teachers had been in their classrooms for a few weeks; this gave them an opportunity to become adjusted and comfortable in their environment before observing them.

Twice the student teacher was videotaped teaching a lesson. These were then viewed at home by the participant and then played back during the interview to stimulate memory and discussion. While the researcher must be mindful of anonymity, it is felt that this means of gathering data was more thorough and revealed information that perhaps would be missed in an audiotape. All families of the children in the classrooms of the participants were notified of the nature of the research. Permission was required in order to videotape them. Because teachers often move around among the children, the videotape often caught the children in the frame as well as the student teacher. One school, which collaborated with one of the colleges, was accustomed to researchers. The principal gave approval immediately. Three others, when given a template letter, slightly modified the letter written by the researcher and sent it home to each family in the classroom being videoed. These three got full permission to participate as well. Only one school had five children whose families did not give permission. The cooperating teacher in that classroom marked each child's desk with a stick-it note so that I would know not to get those children into the video. At times this was a challenge. I had to use

the 'pause record' button several times when certain children walked into the frame of the video. The student teacher also had the video in mind when she planned a lesson in which she was in front of the room the entire time. I was relieved that this happened in only one classroom because I worried that the resulting restrictions could influence the data. If it did, this was not obvious.

For each observation a video camera was set up. During the first observation it was not turned on but was set up so that the children and teachers got accustomed to it being there. At the next two observations the camera was turned on and the student teacher was filmed to gather data for this research. These videotapes were then used in the second and, in one case, third interview to stimulate recall and relate to prior experiences.

Stimulated Recall

Stimulated recall involves the use of audiotapes or videotapes, which are used to aid a participant's recall of thought processes at the time of the observed behavior. It is assumed that the cues on the tape enable the participant to 'relive' the episode to the extent of being able to provide, in retrospect, all that is relevant to her actions and decisions.

The first use of stimulated recall is attributed to Bloom (1953) who used audiotapes of lectures and discussions, playing them back to students for commentaries on their thoughts. Later the students' reported thoughts were categorized by content and relevance to subject matter being studied. Thus comparisons were made between the two learning situations.

Several studies adopted the stimulated recall technique to investigate the thought processes and decision-making of teachers while teaching (Peterson and Clark, 1978; McKay and Marland, 1978; Calderhead, 1979, 1981; McNair & Joyce, 1979; King, 1980). Schempp (1995) in a case study of one high school physical education teacher examined the criteria used to acquire the knowledge he found necessary for his professional practice. Using stimulated recall from videotapes, among other sources of data such as interviews, observations and artifact and document analysis, it was determined that the teacher had developed five distinct knowledge categories. Using the same data collection methods as Schempp, Stough (2001) investigated using stimulated recall to facilitate the transfer of expertise through the provision of expert special educators in real-world context to student teachers. She concluded that the technique is easily implemented and requires a minimum of supervision while producing a maximum opportunity for reflective thought. Stough & Palmer (2003) examined the instructional decision making of nineteen expert special educators using stimulated recall. They found that actions taken in the classroom were a product of the teachers' hypotheses combined with frequent reflection upon their knowledge of the students and upon educational practice.

Some limitations of this method have been indicated. First, for some teachers viewing a videotape of one of their lessons is a stressful, anxiety-provoking experience. This anxiety may influence the recall or the extent in which the participant is prepared to report it (Fuller and Manning, 1973). These researchers also suggest that teachers may be distracted, at least initially, by their own physical characteristics and mannerisms. Also participants may distort or change their recall of thoughts in order to present themselves

in a more favorable light. Other researchers (deGroot, 1965; Hargreaves et al., 1975) have pointed out that some areas of a person's knowledge have never been verbalized and may not be communicable in verbal form; this may, for example, be tacit knowledge developed through experience, and trial and error. Another problem that has long haunted researchers is that in interviews and questionnaires the respondents may identify the aims of the researcher and comply with them. Verbal reports of thoughts and actions are easily influenced.

There are, however, some suggestions in the literature to mitigate these limitations. The "establishment of rapport between the participating teachers and researchers, and the teachers' familiarization with the stimulated recall procedure, considerably reduce these influences and result in fuller recall commentaries" (Calderhead, 1981, p. 213). Preparing the research participants about the procedure was utilized here. It seemed advantageous for the participants to view all or part of the tape before beginning the interview questions. Therefore, the participants were given a copy of the video to look at alone at home before the interview took place.

Gaier (1954) compared university students' success in recalling events in a free recall situation with that of a stimulated recall session where a videotape was used. Recall of events was considerably more detailed in the stimulated recall session.

The time between when the videotaping took place and the time of the interview may be a variable that was not taken into account in this research. This time between taping and recall varied from as little as ten days to a maximum of 27 days. There appeared to be no significant relationship between the length of time between taping and interview and the amount of recall.

Documents

Additional available sources of information were utilized to triangulate and supplement the data from the interviews and observations and videos. Using different data sources serves to validate and cross-check the findings. Journals and portfolios were analyzed. Each participant agreed to share his portfolio and journal at the second interview. They each gave permission to the researcher to copy any parts that were usable. The advantage of these documents is that they required little additional effort on the part of the researcher or the participant.

The journals were reflections of the participant's student teaching. The content was somewhat restrained because the journals were to be handed in to the college supervisor. Entries were made approximately twice a week throughout the practicum. A couple of the participants made daily entries.

The portfolios are authentic documents developed for the job search. They incorporated resumes, statements of educational philosophy, lesson plans and reflections, photographs, descriptive statements, and more. They were a wealth of information about each participant. However, it is important to be mindful that these portfolios are written to present the candidate in the best possible light for employment and may not reflect true feelings and accurate information. School websites provided additional sources of information for this research. These websites will not be identified in the references for reasons of confidentiality.

Classroom & Personal Values Priorities

During the analysis of the first interviews and observations, it seemed useful to see how participants would value various personal and classroom issues. The challenge was to think of a way this could be determined without asking direct questions about each one. If only open-ended questions about values were asked, they would perhaps overlook some important ones. I made up a list of things that humans beings in our present day culture would be likely to value and asked participants to rank items on the list from '1' to '5' with '1' being the highest priority item. Some were classroom values and some were personal values and so they were separated accordingly. I felt that if I just gave them my list and asked them to prioritize that it might give me some helpful information as I analyze the data. At the very least, it would verify other data and serve as a further measure of triangulation.

Analysis and Management of Data

Taped interview data were transcribed as soon after collection as practicable. Coding began after the first observations and interviews and continued throughout the research. This initial coding provided missing information and ideas for additional questions during subsequent interviews.

The bulk of the data analysis was done after all data was collected. Data, and the interpretations of the data, was shared with the participant to reduce the possibility of misconceptions. The comments and corrections of the participant were then used to

revise the information. Programmatic understandings were cross-checked with professors and supervisors.

Using the constant comparative method of data analysis (Glaser & Strauss, 1967), the data was analyzed as immediately after collection as possible so that it could be used to generate more questions for interviews and more information for productive observations. This is a means of developing grounded theory, which consists of categories, properties, and hypotheses that conceptually link between and among the categories and properties and that are grounded in the data. The basic strategy of this method is to do just what its name implies....constantly compare. These comparisons lead to tentative categories that are then compared to each other until a theory can be formulated (Merriam, 1998). This process is inductive, iterative and time-consuming. It requires visiting the data again and again. This process is to see how new ideas relate to the old and to see how the new ideas fit the data, to clarify and sharpen concepts and questions, to read more to shed light on the data, to 'go round in circles' again to check earlier analysis. From this process there emerges concepts that are interconnected and which lead to formulation of theory.

The construction of the categories was influenced by a pilot study (Klausewitz, 2002) and the reading of books and articles relating to student teaching, nontraditionally aged students, and the impact of biography and life history upon teaching. Categories for chapter 4 came from the biographical data, which was primarily found in the first interview and the Rainbow of Life Roles. See Figure 1 in Chapter 4. Tables 4 smf 6, which summarize and compare the participant's life events, and Table 5, summarizing the settings, were the result of the first data analysis following the completion of the data

collection. Doing these tables first served to focus the data analysis and choice of categories to begin writing chapter 4.

Limitations

Since these are individual case studies, the findings are not generalizable. They are representative examples of what is out there. I can *never* hope to accurately represent even one of these lives and can only see a sliver of what is actually happening in each classroom experience. A life story is always an interpretation. People speak about themselves and answer questions and in doing so, they socialize the life story they have been telling to themselves by telling it to others. "This world of interpretation is often dependent on the dialogue that takes place with the researcher and this social situation certainly influences the content of the narratives" (Dominice, 2000, p. 63).

Researcher bias and subjectivity are an inherent part of research. Despite my intention to be open to the worlds and attitudes of participants and not to be judgmental, I carry to this research my own set of values and ideas about teaching and learning. I bring my own experiences as a supervisor of student teachers at a large university and at two private colleges. While these experiences bring bias, they also bring advantages of understanding, empathy, and valuable personal experience.

It is these internal ideas that, in fact, guide the research and lead me to ask particular questions and even to interpret what I am observing and hearing. Data was collected at a time when the participants were doing their student teaching. By the time they begin teaching in their own classroom some of their ideas may already be changed.

Finally, participants who chose to take part in this study may be naturally more articulate and reflective than those who chose not to participate.

Trustworthiness

Issues of reliability, validity, and objectivity are important for the soundness of any study for the qualitative researcher. Multiple strategies were used in this research to establish trustworthiness. The data sources, including interviews, classroom observations, videotapes, and documents were checked one against the other. Data from each interview and observation was triangulated with all successive interviews and observations to increase the trustworthiness of the research.

For member checks, participants were asked to scan transcriptions of audio-taped interviews that were electronically mailed to them in order to validate the accuracy of the data. Sometimes it is difficult to understand data that has been transmitted via a tape recorder. To avoid misinterpretation of the data, interviewees were asked to read the transcribed text for overall accuracy. Also, the researcher asked for clarification of data as needed. A couple of the participants did suggest changes for clarification.

Peer debriefing sessions were held throughout the study with professors who are experienced researchers but not related to this study. They were asked to validate the coding and to read for content and understanding.

CHAPTER 4

DATA ANALYSIS RESULTS: DESCRIPTION & ANALYSIS

"No doubt the greatest opportunities for self-renewal and new growth occur at those periods of life when one's role changes." John Gardner

Introduction

Many of the ways that teachers learn about teaching is separate from their formal professional work. They learn about intellectual and moral development in their roles as parents. They learn about other forms of instruction through activities such as coaching and other youth-related work (Bransford et al. 2000). They learn about dealing with people of all ages in other jobs and careers.

The research participants, aged 38-45, all doing their student teaching in elementary schools in the spring of 2004, have all had former jobs and they are all parents. Each is coming to teaching later in life than traditional students. Their lives can be seen as layers of concentric circles with the individual in the center (simplified graphic in Figure 1). Each layer adds a new role as well as new dimensions and complexity. Movement from one layer to another layer is often described, by the participants, as transformational (Mezirow). The results of this research may be thought of as 'becoming a teacher: the influence and evolution of prior life experiences'.

In Chapter 3 the participants were introduced (the 'self' in figure 1 below). This chapter will begin with them as students, from early schooling until now. Then the evolution of each life is presented: from student to worker, to parent, and finally, to teacher. It is essential to present their lives and background in order to understand the choices they have made and the images that guide them as they learn to teach. Hence the

subheadings of each section begin with "Images and Experiences from ....(Parenting or Student Teaching)." Table 6 presents a summary of the life and job experiences of participants.

Although it was not visualized at the beginning, as this research progressed it seemed that it would be useful in understanding each individual to learn something about the personal values of each. Each participant was given a list of things that humans beings in our present day culture would be likely to value. They were asked to rank items on the list from '1' to '5' with '1' being the highest priority item.

Personal Values

Surprisingly, no one asked for interpretation of any of the values. The items were rather straight-forward and represented values common in our present culture and yet it seemed like the 'religion' one would perhaps elicit a question. Does it mean organized religion or spirituality? But if they thought it, no one asked. One participant ranked only her top five. The other four treated it more like a Likert-type scale rating with several items receiving a '1', several '2's and so on.

All participants ranked 'family' as their top priority in personal values. Good health was a close second. Then came 'peace and well-being'. Not surprisingly, religion was number one in one person's family and the data from his interviews verified that. This was David, whose mother was a nun for a year, and he is the one who teaches classes in religion for children. However, it was somewhat of a revelation that all others placed religion as a number five priority. Therefore, religion was tied with socio-economic status for a last place priority. This too would be an interesting topic for

further research. A chart of personal values for each participant is found in Appendix H. The last column is the average ranking of each value.

Figure one presents a graphic of life roles and transformation into the role of teacher. The order of the concentric circles may vary with different individuals, but this figure represents roughly the order for these participants, although worker, for example, might come both before and after the parent role or it could coincide with each of the life roles.

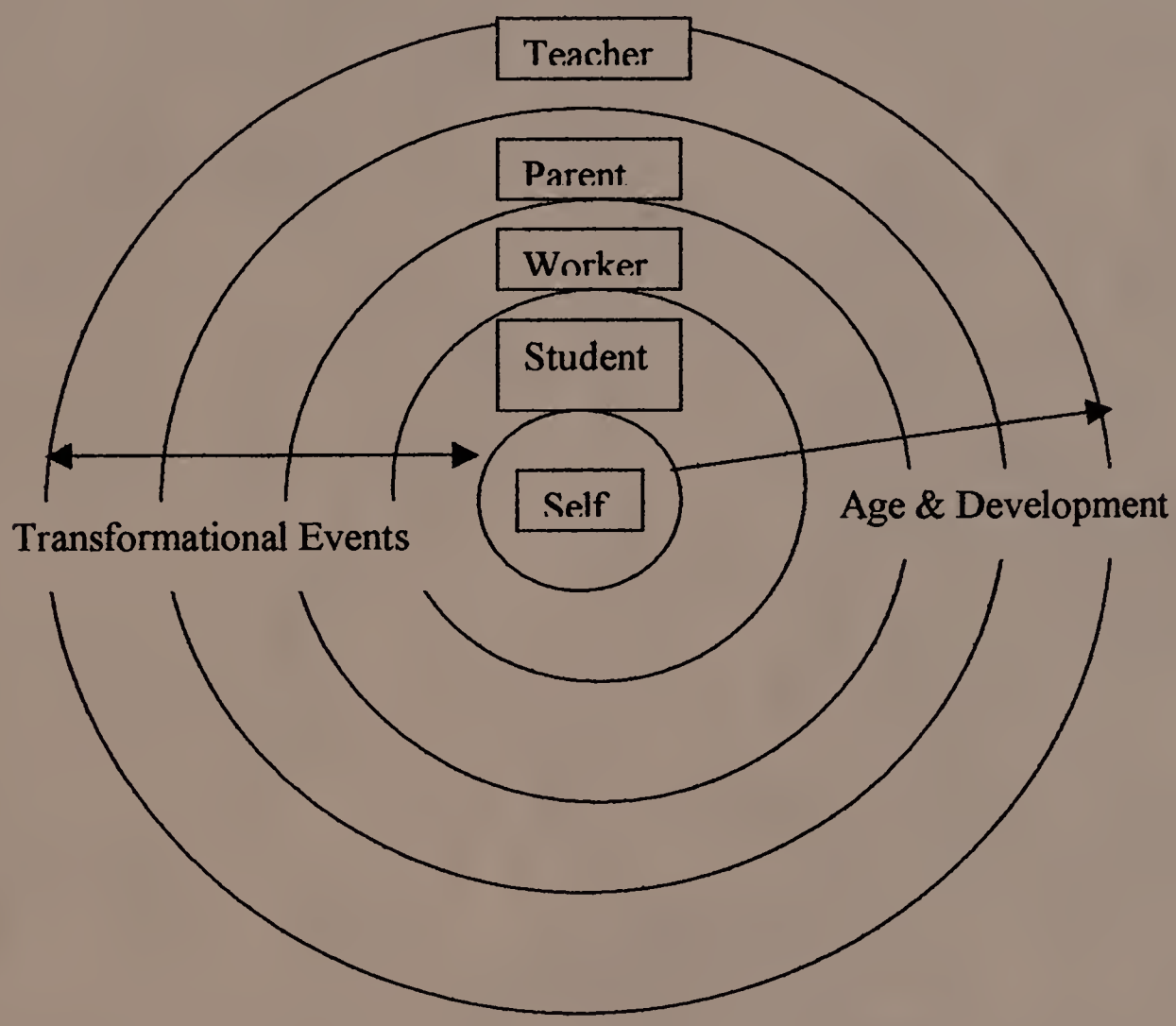


Figure 1: Life roles and transformation in teacher development

Images and Experiences from School Days

Participants in this research all went to public schools, elementary through high school in the Northeast or Midwest. One attended small rural schools and several attended suburban schools. We can expect that prior experiences in school, or what Lortie (1975) called the "apprenticeship of observation," will be more powerful than the teacher-preparation program. The influence of this prior "apprenticeship" will persist and aid the development of authoritarian teaching practices that Kathy and the others deplore. Gary Knowles in his study of TRI (Teacher Role Identity) says that TRI is more closely linked to early experiences as a learner than to university training. At first the university training is evident but as difficulties emerge, the pedagogical training is peeled away first and what remains is the stronger images from days as a student. Preservice teachers then tend to rely on deep-seated personal experiences and life-long ways of coping and solving problems.

Each of the participants were asked about their own schooling experiences. David, when asked to rate his feelings about early schooling (K-5) on a one to ten scale (1 low to 10 high), chose a '9'. He said that his memories were very positive. He lived across the street from the school and his dad was the principal so his experience in the grades "blended home and school." It was sort of a "24/7, 365 days/year event." He remembers a sense of accomplishment with respect to academic performance and he remembers that it was fun playing kickball. He says that the only reason he doesn't rate it a 10 "relates to the normal kids stuff with some memories of playground 'bullies'." David remembers his junior and senior years in high school as the high point of his schooling.

Most of the participants went to traditional schools but Diane described one year that was different in second or third grade. She was in an open classroom. She loved it but her parents did not because they said that she was becoming too independent and not following the rules at home. She described it thus,

> It was just way too unstructured for my parents but I remember loving it. You could kind of design what you wanted to do every day. I spent a lot of time socializing, reading. I did a lot of reading. But my mom still jokes about it being an awful experience.

Diane rates her early schooling as a '6'. She remarked, "I didn't really come into my own until upper elementary, which I'd rate an 8, but the early years were more like a 4…I had trouble with conformity."

Suzanne's happiest time in school was also in high school. She recalls a wonderful social studies teacher who let the students do these "wonderful projects that were real life, …we would have a mock election, a mock primary. He would invite candidates to come and speak to the school. He was a wonderful teacher with a lot of creativity." To my request to describe that teacher, Suzanne replied, "I would describe him as a leprechaun. He was short and always smiling and happy. One of the things he used to love to do was jump up in the air and click his heels together three times." She said he was more enthusiastic than any of her other teachers. Suzanne said that she thinks he was her inspiration for choosing government as a major in college. Her double major also included German and she described that teacher as one who "came up with creative activities for us to learn German as opposed to having us sit here and memorize. Real life situations like sitting in a café, ordering…" Simulation of real life experiences in the classroom obviously enhanced Suzanne's learning and enjoyment.

In regard to her elementary years Suzanne gave them an overall 7 out of 10.

She actually rated each year, from a fourth grade low of 4, "a very bland teacher who never smiled. I don't recall any creative or imaginative projects from this grade." Her high, 9, was in third grade with a "very creative teacher". Suzanne values creativity as an important trait for a teacher.

The last two participants attended small schools. Ann's school in the Midwest was small and the children who were students there were close friends. Since she did not arrive at that school until sixth grade she said that she never felt completely like she belonged there because everybody else had been there since first grade. She feels that is why she and her oldest siblings moved away. Her two youngest siblings really felt at home there and she said they are still there because "That's really the only place that they remember."

Kathy, on the other hand, went to the same school as her mother and all of her siblings. They grew up there and stayed there. She talked about her early schooling easily and told much more about it than the other participants. There were 25 people in her graduating class. She remembered odd things, like a fourth grade teacher who had shoes to match every outfit. Her fifth grade teacher was her first male teacher and she had a crush on him. She loved his sense of humor and his sensitive caring for his students. Math made her very nervous, especially in third grade when she had a teacher who made the students do competitive math on the chalkboard with multiplication tables. In second grade she remembers being nervous about telling time. But when asked to give an overall rating (1 low to 10 high) of her feeling about her early schooling she gave it a 5. She says, "By that I mean I don't remember feeling particularly happy in or about school, but I don't remember feeling unhappy either."

Three of the participants went to private colleges. Suzanne and Ann spoke little about their undergraduate experience but David had more to say. David described his two favorite professors as those who were passionate about their subject and he said that was the only thing they had in common. He said they had very different styles of teaching.

Two of the participants went to large state schools for their undergraduate work. Diane did not particularly enjoy high school but she really did enjoy college, where she studied English and journalism. She loved the freedom, just as she had in that second grade classroom. She described classes that she loved where students did projects. She liked working on projects and thematic units. She said that she's "more comfortable in school doing a few things over a longer period of time."

Ann is the one participant who was completing, not her graduate degree, but her undergraduate degree during the time of this research. She perceived some classes to be very helpful and others not. Ann mentioned a class called 'Premises of School' saying, "It's good to know that history but it doesn't seem like something you're going to use every day. I like the classes more that seem more like things you're going to be doing. It seems like a lot of things you learn, it's like this is all great but it's not something I'm going to be actually using in the classroom. It's not going to help me everyday." It is typical of students in teacher preparation to prefer classes in which they are receiving information that they perceive to be directly useful to them in the classroom, even though they aren't sure exactly what will be useful yet.

It is probably significant that all participants are high achievers, at least in their teacher preparation programs. High achievers generally have a more positive attitude

about schooling. The cumulative grade point average of four of the participants was included in their portfolio. On a four-point scale three of the four had a 4.0 or "A" average; the fourth had a 3.9. Participants were not selected for their academic achievement. Perhaps that was a self-selecting factor, however, because it seems reasonable that only capable and confident students would volunteer to take on the additional responsibility of the research.

Images and Experiences from Work, Jobs, and Careers

All participants were asked what they learned in their jobs that might carry over into teaching. What they mostly talked about were professional characteristics that were enhanced by previous work. Those characteristics included responsibility, leadership, hard work or work ethic, time constraints, flexibility, interactions with people, need to continue learning, problem solving, accommodating others, patience, adaptability, prioritizing, and organization. One that was mentioned frequently was organization, both of time and materials. 'Interpersonal skills' was mentioned by each participant. This skill was mentioned many times in different ways: 'dealing with customers or co-workers', 'working with all different personality types', 'being tuned to the needs and feelings of others'.

In order to approach this idea in other ways, previous job skills carrying over into teaching, they were also asked specific questions like

> How would you compare the differing work environments?
> How did your other jobs compare to teaching in learning them?
> How do other jobs compare to teaching in rewards and feedback?
> Job satisfaction?

Sometimes it was simply "Tell me about your job." The following are the responses of each participant.

Ann

Ann was a waitress and did baby-sitting before joining the Air Force. She was a pharmacy tech in a mobility unit in the Air Force. So she did training and triage like a field hospital. Ann tried to compare working in the pharmacy with the classroom environment. The main similarity that she came up with is that in both cases the work is never done.

Ann was asked how other jobs compared to teaching, from the perspective of learning the job. She said that the military and parenting were both very much learning on the job.

> The military, they did send you to a tech school where you learned a lot of stuff but basically you learned on the job. OJT. Teaching might be kind of that way too but I do think you need to know a lot more going in. I think if you just go and try to learn on the job you're missing a whole lot of it. There's a lot more that's important. I think, in the military, I could have skipped tech school and just learned everything I needed to know OJT and I would have been fine. As a parent I had background knowledge but you learn a lot of it as you go along. As a teacher, it's important to have that knowledge going in and to constantly be learning too. Be reading and know what's out there.
>
> Because when you're teaching you're by yourself in the classroom most of the time so you're not learning from other people as much. You need to be going out and finding things on your own. For student teaching and pre-practicums you are observing teachers but after that you're on your own.

When her eldest was born, Ann took a leave of absence, thinking that perhaps she would return in a year. Then her husband got orders for Turkey. She and her husband decided that it would not be wise to have two active duty parents so she did not return to

the Air Force. Ann summarized that in the Air Force she learned leadership, prioritizing, organization, and responsibility.

David

David says that his managerial experience helps him to relate better to the role of the principal. He says that he thinks of himself in his old role in terms of what the principal has to deal with. He feels that it gives him some insights and abilities and appreciation for what she's doing and how tough a job it is to be the principal.

Watching the time is something that participants have had to do in both former jobs and in teaching. David related an incident that took place when he was giving an employee a performance review and had to watch the time because he had another appointment. The employee brought to David's attention that he kept looking at the clock. He remembered thinking that the employee was right. He related this experience to looking at the clock in the classroom. He felt that he must be careful not to do that because "if I'm looking at the clock, the kids are going to be sensitive to that " (that it isn't important or that it's rushed or it's time to leave).

Yet the classroom teachers of the twenty-first century do have to be mindful of the clock because of scheduled activities like lunch, recess, physical education, library time, computer time, music, and a myriad of other activities. Because of his earlier experience however David will no doubt look for a way to glance at the time so that children do not notice him.

Ease and skill in using computers is something that David brings to the classroom. One lesson that I observed was prepared and presented on his laptop. Fortunately the

classroom was equipped with a large screen onto which he could project the lesson. David's computer skills make his written work looks smooth and polished. When he sent a letter of introduction to the parents of the children, he included a digital photo of himself that he inserted into the text. It made the letter more real and appealing. His portfolio was professional looking with graphics and pictures included.

Even though it appears in this research that David brings many skills with him from previous jobs, he does reflect that he hasn't been able to draw a lot yet from his business background in dealing with the children. Yet in a later interview he decides that the analytical roles from his jobs helped him to see the kids as problem solvers. "I'd want to present to the student not just the information but I want them to be able to solve problems in issues and discuss them." In tapping into the analyst role, "I tend to look at the students as junior analysts, that's what will help figure this out themselves." From his managerial roles, he feels he draw upon time management, preparedness, interfacing with different constituencies like other teachers, peer workers and administrators.

He finds the experience of being in front of the kids very humbling. Echoing Diane's words, David said, "There's virtually no stop during the day." He also used the term 'on' when he said, "you're 'on' from the moment you get in there. You're 'on' and "it's humbling."

In terms of satisfactions from teaching, David has said that there is real satisfaction in seeing progress with students and there is more satisfaction at home too because he can spend more time with his family. He sees what he's doing in the classroom a lot more closely related to what he is doing at home than he did as a

consultant or director of consulting for a software company. David welcomes the newness of this experience; he is a lifelong learner.

David said that his business career was lucrative and also satisfying but a huge downside was being taken away from his family because of long hours on the job and being 24 hours on-call. He said that money is a pretty powerful motivator in terms of achieving bonuses and tying targets to money. He says that's gone. Doesn't exist. He also says that he hasn't formed strong judgments on whether he thinks the compensation is right or fair. That's not why he made the move.

> …what I am saying with job satisfaction, that the money factor, while it did provide some level to stay, in the business world, I'm traveling a lot. I'm away from my family. This is a tough decision I have to make. But I've got that money in the back of my mind…that's not there (in teaching). So what takes the place of that? What takes the place of that is, for me, just the enjoyment of seeing actual progress.

When asked how to compare environments for teaching with environments in business, David said that facilities are very different but comparable. The school was brand new. In his utility job he had a corner office in the Prudential Building (downtown Boston skyscraper). In the startup software company he was crammed into space in Cambridge on a second floor. But the point is, he said, "What is the priority? Even though we were crowded at one business location and the carpets were threadbare at another, there was never a shortage for the best PC…for what we needed to get the job done we were never wanting for that…even after the bubble burst [boom of the 1990s] you had the resources you needed on the priority items." And then he compares this to teaching:

> I don't necessarily get the sense that in the classroom everybody understands what the main resource is OTHER THAN, and maybe this is where it is, IN THE

> TEACHER, in terms of trying to drive down the student-teacher ratio. To me, when I think about it, that would be where I'd invest my dollars. Trying to create small classes. I'd rather spend it there than the technology.

David, more than the other participants, often referred to curricular and budget decisions. He often seemed to step back from what he was doing to look at the bigger picture, in the way that an administrator or businessman politician might do. Adults think according to the epistemological assumptions prevailing in their profession (Dominice, 2000). For example, a professor of medicine working mainly in the field of patient education has to shift his scientific view in order to be able to deal with patient learning. Thus, a career shifter, from business management to teaching would have to shift views to think about, not just management and organization and hierarchy, but about nurturing and learning and democratic values. When I asked David about this he responded, "...my views are still evolving." But then he went on to compare business with education so the influences of his business mindset were still strong. He said that in business he had three main "constituencies" to serve; customers, superiors and employees. He elaborated, "To say that my job was to provide a balanced response to these three groups would be inaccurate. In effect, the customers' needs always had to be paramount." In his shift to education, he was asking himself, "Who are my customers? What are my products? Are my customers the students, their parents, school administrators, or even society as a sort of overarching customer?" He decided that, in teaching, he had two categories of bosses...the parents and the system's administrators. Then he concluded that the students are his customers because he is ultimately "accountable to them".

> To be sure parents and administrators are critical parts of the equation, but if they are the customers then the students seem to become my "products." This does not

> 'fit' for me. Instead, I see my products as my daily lessons and my ability to understand and meet the children's unique needs. Perhaps my "product" is measured by the students' incremental academic and social "growth." In this model, the children are my customers. Measurements like grades, MCAS scores, in class-discussions and my classroom's atmosphere become ways for me to measure 'customer satisfaction'.

This latter part, where David speaks of how to determine "customer satisfaction" or success supports Kile's (1993) observation that nontraditional students appeared to understand the complexities of teaching and learning more than traditional students. For example traditional students believed that they could determine whether or not students were learning from their classroom behavior, that is, in their view, if the students looked like they were enjoying the activity, they were learning what the teachers were teaching. Nontraditional students believed that student learning could only be determined through examination of student work. David goes further and mentions tests, discussions and class atmosphere as additional measures of learning.

Diane

With communication, both oral and written, being so important in teaching, Diane's prior job experiences will be helpful. From her editing jobs she has learned being able to speak in front of people, the editing, the writing, people skills, and generally being able to deal with people. In her editing jobs she found that taking one book or a project at a time worked in very nicely with having young children at home. It was a pretty steady source of money but a down side is that there are no benefits. When Diane was asked about how teaching compares she said that being on her feet all day teaching was difficult and not being able to go to the bathroom or eat when you want was difficult too.

> ...you have to be very 'on' when you're a teacher all the time that you're there. I don't think there's any time to kind of go shut the door and be alone. That's hard.

> You really have to pace yourself. You have to be 'on' for parents. You have to be 'on' for the kids. You have to be 'on' for the other teachers. Sometimes I thought that was hard. I definitely feel like that was hard.

Diane said that at the end of the day she would stay way too long organizing and planning and it just seemed like by the time she got home she had no time for anything else.

Even though teaching is demanding and exhausting Diane was quick to say that it is incredibly satisfying.

> It just puts the other stuff to shame. Like all the times you worry about little things. I mean everybody gets into their job if they do a good job and it's like the most important thing. I truly believe that people are the most important thing. There is nothing more important. Maybe being a brain surgeon would be as important.

In her editing jobs Diane says that there are evaluations and there is a supervisor who works closely with you. You write goals together. She feels that part of being good at anything is to be constantly changing, challenging your self. She says:

> The best teachers are constantly learning. The best employees are constantly willing to try something new. The best work environment encourages that. Make it interesting. Make it worth your time to try new things. You make mistakes. That's the big thing about teaching. You do make mistakes. Students make mistakes. You never want to feel like a defeated child just like you never want to feel like a defeated employee. You need to understand that you can make mistakes and keep going.

Diane used her skills from her editing jobs in the classroom. She told about one girl who had a lot of potential who was writing the same thing every Monday and Friday when they did journal entries. The teacher would use a starter phrase like "My favorite lesson was.... gym because 'it was fun'. This is what Diane told her:

> I often kept a journal over the years and I remember telling her that I did that and tried to share how a grownup would also write down...and the purpose of it was to kind of remember what was interesting about it. I wasn't writing necessarily to learn but I wanted to remember details about things. So I shared that. It really

did help. You could see the little light go off....ohh, I'll always remember that it wasn't just fun but why it was fun.

Other times children would want to know how to spell and a word and Mrs. McC. wasn't sure. She would often ask Diane because she quickly learned that Diane was very good at spelling. One child asked her, "Do you know how to spell a thousand words?" Her response in a teasing voice was "I never counted but I know how to spell a lot of words. And when you get to my age you'll be spelling a lot of words too! You already are spelling (words)."

Diane feels that encouragement is very important, especially to budding writers, whether they are adults or children. She says they want reassurance that they're on the right path. About children's emerging literacy she says, "You want their thought. The whole idea of the red pencil...they even know that at a young age".

Kathy

As an insurance adjuster Kathy also learned on-the-job. She learned to deal with adults in this job. She said, "You have people on the phone, upset or whatever, just keeping my cool and my frame of mind." She learned to let people say what they have to say.

Kathy was also a "temp" doing office work. She did not like that job at all. She said, "...every week you had to go in and meet new people. It was stressful. I hated it!" She did both of the above jobs for about a year.

The job that she has enjoyed is being a librarian at her children's school. This is the job that she took leave from to do her student teaching semester. After student teaching was over, she returned to the job to finish out the year. Even though she

enjoyed this job, mostly because of the children, she said that the teachers showed little respect for her position. Kathy did say that she had gotten positive feedback from some of the teachers but others, she felt, didn't give it a thought. One of the things that she has learned from this job is to have empathy for all of the support people in the schools. Patience is another thing she has learned from this job, as well as from the insurance adjuster job, that is important in the classroom…patience with each and every child. Too often Kathy says she sees impatient teachers yelling at children. She feels there has to be a better way.

Suzanne

Suzanne was a waitress while still in school. Right out of college she worked for a ski company and the parent company was Austrian. She had to translate some things from German to English and this is the only time that she has needed to use her German major in a job. In her most recent job she marketed software conferences, "putting together the brochures, developing a mail strategy, purchasing lists that the brochures and marketing pieces would be mailed to, actually designing the marketing materials that would be mailed out to potential attendees to the shows." In this job Suzanne learned to work with a strict deadline. She sharpened her organizational skills. She learned to multi-task. On the computer, she created spreadsheets, created worksheets, used clip art, and created marketing designs. These skills she says she has used in her teacher preparation.

The training for this job was, like Ann's job, on-the-job training. Suzanne spent three to six months training in an apprentice-like role and from there she took off. She

said that she could learn everything she needed on-the-job. But in teaching, she said, "you are always learning."

The rewards of teaching, Suzanne reflects, are great. She said that you have the feeling of doing something important and making a contribution. She said that being a teacher feels natural to her. Her other jobs did not. She related that other people had commented to her that she would make a good teacher and then when she had her own children she realized that she had teaching skills and the desire to do it.

Images and Experiences From Other Activities

Leisure-time Activities

Employment and previous jobs are not the only source of learning that carries over into the classroom. Participants have many interests. Since they have young families the non-job activities now center mostly on the family.

With the various 'outside of job" activities of the participants came increased understanding of children of different ages. Dave coached children in grades 4 and 5 and then was assigned to grade 5 for student teaching. He feels that he has gotten to know children better at that stage of development. David says that he has not had a lot of hobbies or outside interests since his kids were born, "aside from things that are very family, church-oriented, sports-oriented." He sees definite links between coaching and the classroom. He found that dealing with kids in a coaching setting, bringing some structure yet giving them some freedoms in the field, translates pretty well into the classroom.

Diane has led a Girl Scout troop for five years, following the children from kindergarten through grade four. She was awarded the Outstanding Leader Award. She pointed out that scouting encourages taking responsibility for one's own actions and learning. She feels this expectation is effective in the classroom too. Diane is also very involved in the schools. She volunteers to help on different committees. One that she is on now is the arts and enrichment committee. She doesn't donate a lot of money but she gives her time. Diane talked about how scouting and her work with the city Parks and Recreation Commission and how these activities will help her to become a better teacher.

> Meetings, group meetings, talking, listening…a lot of the most effective groups that I've worked with on commissions and different things I've done. You really have to sit and listen and let everybody talk. We all get excited and interrupt sometimes but that's really important. It's tough to be a strong leader. The teacher [leads] for a while and then it becomes the students. You never know what the dynamic is going to be. I don't feel like the teacher should always be the center of attention in a good learning environment. And that's something I really believe. Even in the most effective groups, I don't think one person…you'd have to let other people have responsibility for it to be successful. That's hard. There are some people who are total control freaks and those groups don't usually work as well.

The children that Suzanne coached in ski racing were 8 to 10 year olds. The second graders in her student teaching assignment were just a little younger. Her own child is the same age as the students she was teaching. So she feels as though she has developed a better understanding of children in the early grades because of these experiences with children. Suzanne and her husband met while skiing for their college teams and the family rents a condominium for the winter in a popular New England skiing area. Suzanne isn't the only skier among the participants. David and Diane both mentioned skiing as a favorite activity as well.

David summed up his various activities and how they have influenced him:

> ...they've influenced me to the degree that the kids in the classroom are getting ME with all of that [sharing who he is]...because I've been very child-focused over the last seventeen years, maybe that will help a lot, not so much from the parenting skills standpoint, but just from shared experience with the kids.

Reading

Each participant volunteered that reading is a favorite activity. This came out naturally when I interviewed two of the candidates in a bookstore, and three in a library. David said that he prefers non-fiction for leisure reading. The others did not specify what they enjoy reading, although Kathy brought two books to an interview with her. They were books about teaching. Kathy looks for books and movies that are a little off the beaten path. Diane, in fact, makes a living reading and editing. The books she edits are mostly education books and are non-fiction. Teachers who are strong readers are always learning. This would have to carry over into the classroom.

Participants used knowledge they obtain from books as well as from parenting and jobs. Suzanne used some information obtained this way when children were asked to share poems that they had just written. One little boy said, 'I just want you to read it. I don't want you to read it out loud.' And Suzanne had remembered reading somewhere that that's typical for boys. They don't want to be embarrassed in front of their friends. They don't like to have their things read out loud.

Travel

Travel is another activity that these participants enjoy. It has often been said that travel is an education in itself, especially for those who get beyond the borders of their own culture.

The "narrow framework of experience" (Paine, 1989) that teacher candidates often bring to teacher education has provided limited contact with people who are ethnically and culturally diverse. Drawing on their own limited experience, they develop assumptions about the learning and thinking of others that fits their own. This is a problem when the tendency to interpret differences in approaches or orientations to learning or schooling is thought of as an indicator of limited cognitive ability or lack of motivation. Travel helps, especially if there is more than a tourist approach to that travel. Living abroad among people of different cultures is probably the most effective way to develop broader understandings. Both Ann and Suzanne did that.

Ann, being in an Air Force family, has lived in many places. Her second child was born in Turkey. Usually, however, bases provide their own services and culture that are rather insulated from their settings. Nevertheless most families do get to do some tourist activity during leisure times. In the states, Ann and her family have been assigned to bases in Illinois, Texas, Oklahoma, and Massachusetts.

Suzanne spent her college junior year in Hamburg, Germany where she became fluent in German. She lived with a German family during this time and traveled extensively while she was there. Suzanne has also "visited Denmark, Italy, Austria, Switzerland, and France". And she has traveled to Canada, St. Croix, and the Bahamas.

Dave said he traveled with his family each summer when he was growing up. When he was about thirteen, the family took a five-week cross-country trip. The highlights for him were Amish Country (PA), Shenandoah National Park, the Grand Canyon, San Diego, Disneyland, Redwood National Park, and Mount Rushmore. As an adult he has traveled on vacations to London, Bermuda, Washington, D.C., Florida, St.

Thomas, St. John, Aruba, and the Napa Valley. Business trips have taken him to cities like San Diego, Pittsburgh, Columbus, Denver and states like Indiana, Michigan, Connecticut, Virginia, and Arizona and "other places that weren't that memorable."

Diane talked about her travels with her husband in Central America because her husband was doing a story about the trip. She has also traveled in England, France, Portugal and Canada as well as to many locations in the United States. She mentioned Wyoming, Utah, Grand Teton National Park, Yellowstone, and Alaska.

Kathy took her first trip outside of New York after she graduated from college. Since then she has been to the Caribbean, Bermuda, and San Diego.

Images and Experiences from Parenting

Powell & Birrell (1992) found that many of the nontraditional students in their study were parents who framed their conceptions of teaching around their experiences with their own children. When participants were asked if they think having children of their own helps them to manage children in the classroom, there was a resounding unanimous YES. Here is the reaction of each.

Ann

"You just don't have the time you have with your own kids. You can't be quite as buddy, buddy or good friends."

> … I think the better you know children the better you are at managing them. When you live with children all the time you know a lot more about children. You can anticipate things that are going to be a problem. Because so many times in classes students who are young and don't have kids will say things and the

> students who are parents know right away that's going to be a problem. They're going to see that as unfair. You know the issues. You know what's going to be an issue with a child.

Ann says that it is different working with children in a classroom than with your own.

> I feel like in some ways the longer I've been there I feel I can't be as nice in some ways as I can with my own kids or my nieces and nephews or something. Not as nice but for their own good in a way. When I started out student teaching I gave them much more help. Now I'm like, "It's on the word wall. Look it up." You just don't have the time you'd have with your own kids or somebody else's kids. And you can't be quite as buddy, buddy or good friends. Because I notice, even in the classroom with kids being kind of jealous of my attention, you have to be careful about that.

<u>David</u>

"I fully recognize that I am not the student's parent."

When David was talking about skills from life that carry over into the classroom he said that the skill set that he found he could apply, although it is completely different in many ways, is the <u>parent</u> skill set.

> I fully recognize that I am not these student's parent; however, there are parenting skills that I have developed well or am still working on that I absolutely feel like I can use in the classroom. I've had to think about the way to use them and how to modify them. These are not my kids and so I recognize that I have to be very conscious of when I apply certain things and when I don't. Classroom management is the most obvious (application). My parenting techniques, while I can call upon them, aren't the primary tools I should be using for managing the classroom. It is different, but actually it's helpful, all those experiences over the years, helped give me an ability to communicate with kids. It has helped. I do call upon it.

David said that all those experiences over the years (coaching, parenting, teaching religious classes) gave him an ability to communicate with kids and thus he calls upon that experience.

<u>Diane</u>

"You learn 'when to push and when not to'."

Diane says that it's different with your own kids. She thinks that's because home is where they're most comfortable and "that's when they let their guard down."

> And there are some teachers who do keep a very strict, structured kind of classroom and I'm sure that's part of it. They want them to know that 'I'm the authority figure here'. I haven't quite figured out where I'll come on that one. I want them to listen when I want them to listen, hopefully to respect that. Sometimes I get that at home and sometimes I don't. But I definitely think I'm aware of when to push and when not to. And I think some kids have bad days some days and you just have to have faith that they'll get over it and the next day will be better. If you never had children I don't think you'd see that as closely and faith that you can reach everybody in the right way.

Diane, in reflecting about doing student teaching at this time in her life, said "If I was younger, I wouldn't have the children and I wouldn't be worried about those things so much [health insurance, finances]. In other ways I wouldn't have all the resources that I have by having had my own children....just the whole way of approaching things, when to push and when not to."

Diane's cooperating teacher even deferred to Diane's parenting experiences when it came to boys. Mrs. McC had only daughters so a couple of time when they were having behavior issues with boys she would ask Diane, "What do you think? You're the mother of a son."

Diane said that she felt experiences with her own children gave her a better sense of empathy with children. If they excluded someone, for example she would try to get them to realize that it really hurts feelings. She said that she could see that with her own children. She said that the children aren't really mean but that "They just don't think about what they're doing."

Kathy

"Kids are kids are kids."

Kathy feels she has learned what is effective with kids and what is not and she can translate that into the classroom. She said that having had your own kids definitely helps you to understand kids because:

> …I've found that kids are kids are kids are kids…no matter where I am I see the same behaviors, the same things. So, as much as each child is unique, you're still going to see the same things over and over. So having an insight into that is extremely helpful.

Suzanne

"She can talk to other parents."

Suzanne did not have a lot to say about this but her cooperating teacher offered an observation when she was talking about having a student who is older and has children of her own. This is what the cooperating teacher said:

> I really enjoyed it [having Suzanne as a student teacher in her classroom] because she is a mother. She has a child the same age as these children so she has that experience. She can talk to other parents. So that part of teaching is all taken care of. It's really wonderful. She sees what comes home with her daughter and she knows what is coming next.

So, to sum up their responses, the participants feel that having had children of your own does help you to manage children in a classroom. Communication, understanding of differences, empathy, and anticipation of certain behaviors were all qualities that they felt transfer well into the classroom.

School Involvement as a Parent

David, Diane, and Suzanne were all student teaching in the same school where they had children of their own attending. Suzanne's daughter was in the classroom right next door. Each of them gave serious consideration before choosing to student teach in their child's school and each of them asked their own children how they felt about it. Each of them was mindful of this difference, not only in the classroom, but, in meetings at the school.

All three of these participants, who had their own children in the school where they student taught, also mentioned times when they could attend events in the children's classrooms or in school assemblies that they could not have attended if they were working elsewhere. In fact, Diane was at an assembly in which her child was performing on a morning that she was going to be first observed for this research. David said that being in the school gave him a chance to go to an assembly in which his son played a large role. He said, "I was standing in the back with my class and thinking, how lucky am I! To be here right now… and getting to see this."

One of the interview questions was, "How is being on the 'inside' teaching different from being a parent on the 'outside'? David responded "Totally." He goes on:

> They're two different experiences. As a parent, I'm thinking about homework. I'm thinking about progress reports. I'm thinking about his overall performance in school and growth. As a teacher in the classroom, I'm thinking about all of that but for 27 kids and from a different perspective of type of ownership. As a parent, I always felt that, first of all, I'm the primary teacher but that's in life skills. Whereas I always felt I'm in support of the school choice that I had made, which is the public school system. To support that in the form of making sure the homework gets done…I view myself as a parent, in terms of his academics, as I'm supporting the teacher. But as a teacher, and this is the big difference, I'm accountable for the curriculum and the instruction, so it really is a big difference in my mind and I think it should be.

Ann had some negative feelings about being on the inside. She saw some teachers who were different from what they would want parents to see. This is the story she told:

> You get to hear what they say about parents and it's pretty shocking. I mean I think…a parent wrote a letter to my cooperating teacher complaining because her son had gotten this really bad report card but she was saying there was no communication. I think she made a lot of good points. I would describe her letter as brusque…no direct accusations or swears or anything like that. But my cooperating teacher was so offended and she took that letter to the break room at lunch and read it out loud to all the other teachers so they could sympathize. I think that's so unprofessional and inappropriate. If I'd written a letter to a teacher, I would hope that she wasn't sharing it with somebody else in the break room. To hear the way they talk about some students too. It's something I would never expect as a parent. Even as a parent you go to a teacher and they just seem so on the defensive. Maybe it's because they're attacked a lot. At the same time, even as a parent, I would say at least she's trying to communicate [parent who wrote the letter] with the letter. It might not be a very friendly one but she's doing something. I'd rather have a parent come into the classroom angry than not to come in at all. That's the way I view it. I just feel really strongly I guess, being a parent, first that the communication with parents is so important. You know, I think I would want to treat parents the way that I would want to be treated.

Ann also perceived that many teachers and student teachers don't like to have parents in the classroom. About that, she feels that "anything you're doing in a classroom you should be able to defend to a parent if they have criticisms. You should be able to explain why you're doing it that way."

In her journal Ann wrote:

> I was so discouraged when I left school yesterday, but at seminar yesterday afternoon a teacher came in to talk to us from the … School. He seemed so enthusiastic about teaching that I felt a renewed sense of determination after listening to him. The teachers around here all seem to be suffering from burnout and it's hard not to catch their cynical attitude. I would love to have a teacher who was excited about teaching and willing to try new things. I would like to try some of the things I've learned about in school or read about, but Mrs. B. seems reluctant to change the status quo.

In one journal entry Ann tells about a fieldtrip and how it differs when you're participating as a teacher and not as a parent. She said that she has been on many fieldtrips as a parent but "going as one of the teachers I felt a lot more responsibility for keeping track of everyone." She expressed relief "when we got back on the bus with all 22 students."

Diane worried about the teacher layoffs and she said that she did find herself taking the teachers' side a lot more. That seems to be just the opposite feeling that Ann had when she relayed the story about the cooperating teacher reading the parent letter to other faculty. Diane is concerned because in the community there is talk about laying off teachers, increasing class sizes and maybe even closing one of the schools.

Diane talked about PTO meetings as a student teacher and how difficult it is to make those evening meetings. She prefaced this with talking about how exhausting teaching is:

> And then when there's a commitment for an evening meeting, even if it's a PTO meeting where you just have to be the teacher there, how like at that point you are so done. You are so done, so done. Yet you want to be a good little soldier and do your part.

Kathy was remembering when her children were small, before she was working at the school, "I wasn't anxious to join the PTO (Parent Teacher Organization) or get into those kinds of things because I didn't know anyone. That whole anxiety thing starts kicking in. If I go, who am I going to sit with? Who will talk to me?" When her children reached middle school she said that she went to one PTO meeting but she felt that there is a core group of people who run things and are cliquish. She said, "If you don't know them, forget it." She noticed that by the end of the year there were not many

people at the meetings. Then she said that she feels guilty if she doesn't join. She said she definitely went to every parent teacher conference opportunity, but her final thought on the PTO meetings was, "If you're going to walk in and nobody cares whether you're there or not then why bother going?"

A summary of the life experiences of participants, drawn from the data, is found in Table 6. The journey into the field of teaching begins after the table.

Table 6: Summary of life & job experiences of participants

Name	Age	Chil-dren	Jobs (top most recent)	Decision to Teach	Transformation(s)	Interests, Hobbies	Spouse's Occupation
Ann	39	M 13 F 11	Pharmacy Tech. (not AF) Pharmacy Tech.(USAF)	Default; dental hygiene (first choice) had a one year wait. Inspired by excellent math teacher.	Becoming a parent	Reading Science	Air Force (retired) Starting civil service job.
David	45	F 16 M 15 M 10	Software company manager Utilities company	Merger of electric company (hearing others reflect) & 40th birthday. Lots of reflection with wife & feeling of now or never. Father school principal 40+ years.	Death of grandparents Birth of children Balancing parenting & careers 40th birthday Relationship with wife	Church Skiing Youth Sports Coach Theater ServiceClub (Lions) Reading	VP of Human resources for hundred million dollar company.
Diane	41	F 10 M 8	Production editor – freelance Production editor Editor	Influenced by editing education books & others who suggested she should be a teacher. Parenting experience.	Becoming a parent Biking trip in Utah Seeing parents age 9/11/01 Husband in NYC	Animals Gardening Hiking & camping Cooking	Editor & Author
Kathy	41	M 15 F 13	Library aide (Elem. School) Classroom aide & substitute Temp. office staff Customer service Insurance claims examiner	Working in school environment; feeling that there is a better way	Moving to Massachusetts Going back to school Seeing a therapist	Reading Movies Gardening Her 2 pugs Home décor.	Data base administrator
Suzanne	38	F 7 M 5	Marketing manager (conferences) Ski racing coach (8-10yrs olds) Advertising director (ski co) Waitress Veterinarian Asst. (father's office)	Having children & watching them learn. Layoff from job after 9/11/02. Desire to be on same schedule as children.	Birth of children End of job after 9/11/01 Marriage Going to college Year in Germany	Time with family Skiing	Software consultant

Images and Experiences from Student Teaching

Journeys into Student Teaching: Decision to Teach

These participants (like those of DeBlois, 1993) made a major life decision to teach. In a survey of teachers, the Metropolitan survey found that the most prevalent reason for going into teaching is the interactions with the students. Teachers like to work with children and youth. They want to make a difference in students' lives. They want to think about ways they can present material so that the children 'get it' (Metropolitan Life Survey, 1995). The participants of this study gave those reasons and one more not found in the literature; three of them mentioned that *they like a challenge* and they see teaching as being a continual challenge.

The participants reentered college after life-triggering events with a reservoir of life experiences that they utilize frequently as a resource for learning (DeBlois, 1993; Hutchinson & Buschner, 1996). Research comparing non-traditionally aged teachers, both in traditional programs and in alternative certification (AC) programs, shows that those in traditional teacher education programs that go beyond the typical condensed pedagogical preparation and supervised internship of AC programs are more positive about staying in the profession (Guyton, Fox, & Sisk,1991; Cohen, 1982). The theory is that extended preparation and reflection time found in traditional teacher preparation programs turns out to be important to retention in the field. Like Freidus (1989) and reiternated in Novak and Knowles (1992) this researcher concludes that second-career teachers decide to teach based upon a complex "interplay of developmental concerns, historical context and personal experience" (Freidus, p. 260).

Ann

"There was a one-year wait to get into dental hygiene."

Ann left active duty in the Air Force when she became pregnant with her first child. She felt that it would not be good for the children to have two active duty parents. She talked about her decision to become a teacher.

> I mean, I think it's something I always thought I might like to do, but when I first went back to college I was really kind of thinking 'OK take the least amount of college, make the most amount of money' or something. I was going into dental hygiene. One reason too was that I had such a phobia of Math. I hated Math. I just thought it was horrible and I didn't need any math to get into the dental hygiene program. So I thought well this is good. But then you had to take chemistry as a prerequisite so I signed up for chemistry and I found that math is a prerequisite for chemistry.

Ann took the prerequisite and had a positive experience. She said that the math teacher "explained it all in such a way that it made logical sense and to me math had never seemed logical before. That kind of inspired me, just the way he took something that seemed so impossible and I totally loved it." She said, "… he never said 'here's the formula'. He let me kind of discover the formula. And I remember that." So she was accepted into the dental hygiene program and then her Air Force husband was promoted and "got orders." So that interrupted her schooling and gave her a chance to think. At the new location, there was a one-year wait to get into the dental hygiene program. Impatient to get on with her schooling and knowing that her husband could retire from the Air Force before she completed her undergraduate degree, Ann decided to go into education. Of the five participants Ann was the one who had the least compelling reason for becoming a teacher. She does like a challenge and she said she is energized by the students in the class and by her supportive family.

David

"It was my 40th birthday. The stars were aligning."

Family and children were also the biggest factor in David's decision to become a teacher. He left his lucrative job because there was too much demand upon his time, taking him away from his family.

> ...spending all the time in the world doing what it took to make that [job] successful made me realize that this just wasn't the time in my life, with three kids, two in high school, one in elementary school, that I could do that and feel good about myself and my relationship with my kids and my wife.

The motivation that got him moving in this direction, however, was more complex. When he was thinking about what he wanted to be when he finished school he consulted with his Dad, a career educator. His father didn't encourage him to go into education because at the time that he was in college there was a surplus of teachers.

> I remember at this point at least having these discussions with my Dad. But then for 15-20 years it didn't come up. It didn't come up until that moment when I had this opportunity to make a life decision if I wanted to do something different. That's when it was, you know education, that makes sense for my next life's pursuit.

What David speaks of, after 15 or 20 years, was the events that took place in his job. He defines this as the moment when he decided to become a teacher:

> My 40th birthday. I was working at Boston Edison. I was leading one of the merger teams. We had acquired another company. On my 40th birthday I was offered a job in the new company, a director level job that would bring me into a career with the new company that for all intents and purposes, I was looking at it to spend the rest of my career most likely at this company. It was one of those roles that was attractive but I said to myself other people who weren't getting offered these roles were being offered attractive severance plans and I made the decision that day, on my 40th birthday and I just thought the stars were aligning...I went home that night, talked to [wife] and said I think this is the time

> for me to think about whether I'm going to stay in this utility for the rest of my career or make a change. And we decided that there was nothing wrong with staying where I was but I just decided to make a change. And at the time I pulled out all the websites on master's degrees in education…I hadn't really decided on elementary yet frankly…I really wanted education. So I went to my VP and said thank your for the offer but could I get one of those severance packages instead?

David's primary reason remained his family. He wanted to spend more time with them. All other reasons were secondary. David enjoys a challenge and he enjoys learning and then applying that learning.

Diane

"It was having my own children."

Having her own children was the catalyst for Diane too. She has been inspired and influenced by other teachers. She has friends who are teachers. She edited many books written by teachers. But she said, "It wasn't because of other teachers that I wanted to become a teacher. I wish it was true but it wasn't. It was really having my own children." She decided to start taking classes for a master's degree in education and certification to teach when the kids were 3 and 5 years old. When she finishes they will be 9 and 11. She has done it a class at a time so that she could also be a parent and an editor without taking too much time for her own schooling. She says that she's always liked to be around children. She feels she is encouraging to children in different ways, usually encouraging creativity. Diane loves making children feel confident that they can learn and she loves getting them to see things in new ways. She said that her sisters said, "When are you going to become a teacher?" Nearly every one of these participants were inspired to think more about becoming a teacher when others suggested it to them

Kathy

"There has to be a better way."

Kathy decided to teach only two years ago. Her part-time library job at an elementary school influenced her. She found that she had a way with children and she developed a vision of the kind of teacher that she did and did not want to be. She wanted to treat children with respect and she wished others to respect her. She saw teachers who were disrespectful of children and workers at the school, and frequently impatient. She felt there had to be a better way. Kathy also sees teaching as being a 'fulfilling job'. She reads many books and loves applying what she has learned.

Suzanne

Her real inspiration is her children.

Suzanne says that her mother is probably the person in her family who is most supportive of her decision to teach. Her husband is very supportive also. The real inspiration, however, is her children.

> I think teaching has been in the back of my mind for a long time. I can't say specifically when, probably after having children and watching how they learn and reading about children's learning. That pushed that decision a little further forward in my mind. Then I was working part time after my son was born and after September 11 when I got laid off that job and I thought now is the time in my life that I should make this change and this is what I want to do. I want to be on the same schedule as my children because I'm interested in what they're doing. I want to be a part of their education and I want to have the same schedule that they're on.

Suzanne loves the creative aspects of teaching. She enjoys coming up with new and inventive ways to teach a lesson. She enjoys seeing what works. She enjoys challenges.

Each of the various life roles that have been heretofore examined add depth to the experiences and knowledge and understandings of each of these participants. Looking again at Figure 1 we are reminded that movement through these various roles is transformational to the individual. It is a personal evolution. There are often key events in an individual's life around which pivotal decisions, such as the decision to become a teacher, revolve.

The next section will examine these participants in their roles as student teachers in public elementary schools. They are trying to make meaning out of their own life experiences, what they learned in their teacher preparation courses, and the realities that they encounter in classrooms.

Shulman's (1986) seven categories of teacher's knowledge were influential in setting up categories for analysis of the data from the classroom observations & videotape, which concentrates upon the classroom. Shulman identified these categories as subject matter, general pedagogy, curriculum, pedagogical content, learners, contexts, and purposes. For the classroom data this research combines several of these categories into the following: child (or student), content, and pedagogy. These are placed within the additional category of context, which encompasses school culture, time and place, and classroom environment as seen in the greatly simplified graphic in Figure 2.

The primary source of this data is the second & third interviews, focusing on stimulated recall while viewing the classroom teaching video and portfolios and journals. Here it is seen how the prior life experiences, previously described, influence learning to be a teacher.

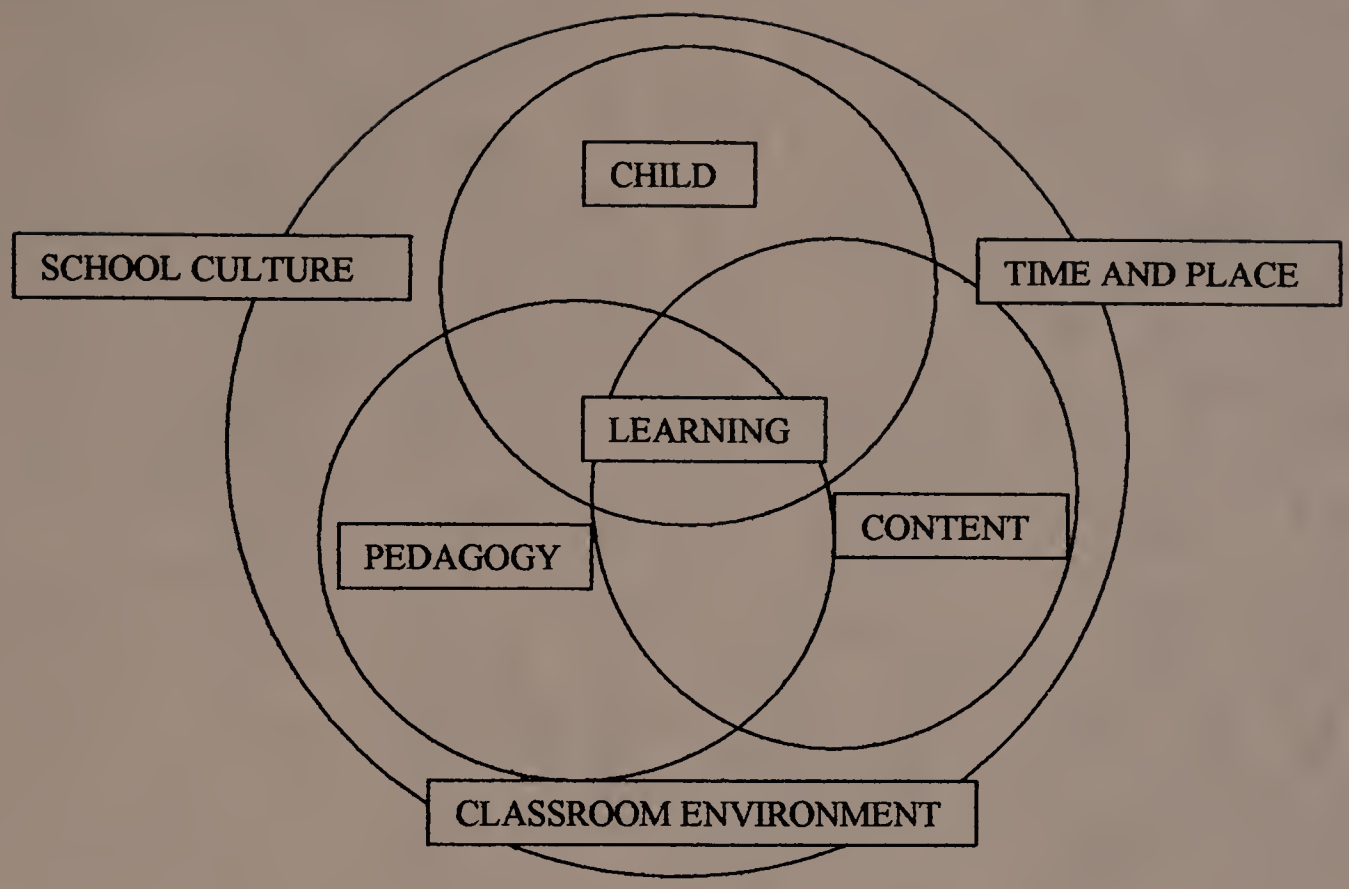


Figure 2: Components of classroom teaching

The Teacher

It is generally believed that the teacher creates the classroom climate. Teaching is learned by applying all that a person knows, but it is also learned by observing and emulating. The cooperating teacher holds the potential to be the greatest influence upon the fledgling teacher's professional development. All participants felt that this person was the most influential mentor in their preparation. And yet they did always feel hampered somewhat in their own willingness to try new things, which would lead to greater professional growth. The awareness is always there that it is someone else's classroom and that the responsibility for the children ultimately lies with the cooperating teacher. So the student teacher feels the need to, for example, follow similar disciplinary techniques and classroom structure, so that the children will not be confused. Ann says:

> ...it's so hard to teach within somebody else's [classroom]...they've got the structure of their classroom and how everything is set up and classroom management and everything and you have to teach within that and it's difficult to do anything different.

Diane wanted to get to the classroom earlier so that she could prepare herself, both mentally and physically for the day but she was hesitant to arrive before her cooperating teacher.

> You're a visitor; you're a guest so I totally want to respect that. Even when I was there early I didn't want to make her feel bad. So it's a little touchy.

After her practicum was completed, Kathy reflected, "...I should have been more assertive in what I wanted and asked more. It was hard."

Kathy said that it was hard for her cooperating teacher to let go of her class.

> She had a hard time giving up control of the class. A lot of teachers have that. As much as she would say, OK, we have to get you up in front of the class, she would just slide into her (role). Once I accepted that, it was much easier.

The life experiences of these student teachers taught them that to move in too soon on another persons space can be irritating and stressful. Duncan (1999) labels these strategies as 'strategic negotiation' and 'strategic distancing'. The skills and sensibilities acquired in their previous employment helped them to achieve an accurate 'reading' of the classroom situation which was successful in both anticipating and dealing with potential difficulties between themselves and their respective cooperating teachers.

Suzanne always spoke positively about her cooperating teacher and yet one comment revealed a minor disconnect. The cooperating teacher commented that Suzanne loved to teach science and math and Suzanne clarified that:

> That was so funny because I like science but math was always my weakest subject. The only reason I was doing the math and science was because those were the first things she gave me to take over. I love the science but math is not

> my strong suit. She thought just because I was teaching it that that was my favorite.

Others commented more directly about disconnects. Ann expressed disappointment that her cooperating teacher was not very innovative. Ann said, "She does a lot of worksheets and things like that."

Sometimes Ann expressed stronger negative feelings:

> At first… it's like she's deliberately trying to sabotage me, or she'd add something like that, something extra so I didn't have enough time for my lesson or something. But I don't know. Toward the end, I think she just genuinely forgets things. I don't think it was intentional but it was frustrating.

Finally she concluded, "It's not my classroom. I'll just do the best I can."

Ann also complimented her cooperating teacher:

> (Mrs. B), I liked her attitude and she had a really good way of explaining things, a really slow and complete way which sometimes I have difficulty with. I tend to talk quick and maybe assume they'll get it.

Student teachers are very well aware of the differences between themselves and their experienced cooperating teachers, especially when it comes to planning. Diane expressed that.

> New teachers tend to go page by page. Experienced teachers seem to know and choose to get to the major learning that they want. (Mrs. M.) did a lot of that. She definitely didn't worry about every lesson.

In her journal Diane expressed the give and take in the classroom between herself and Mrs. M:

> I'm feeling more comfortable all the time just stepping into a lesson, not a big drawn out one but "mini-lessons." I feel lucky that Mrs. M is so flexible and willing to let me take things on. She's certainly not pushy but she's always appreciative when I take some initiative. I'm careful to do things in a way that fits her style because I don't think it would do the children much good if I totally changed the way things are done.

Diane said that her cooperating teacher has helped her "tremendously." She acknowledged that they were different but said that they have the same philosophy about children. She also said, "She's been at it longer so she's a little more relaxed."

> I definitely felt like I was taking some of what she was doing and trying to think what I would do but it wasn't quite there yet. Even at the end. So I definitely felt like I was practicing a lot because I don't do well just following what someone else does.

This idea that David expressed about being uncomfortable with "just following what someone else does" was expressed in many ways by each of the participants. They clearly are each eager to develop their own style, but feel that they can only really do that when they someday have their own class.

David expressed open admiration and yet is mindful of not completely emulating his cooperating teacher either.

> Clearly my cooperating teacher, she's exceptional. She's been teaching about six years, her style appeals to me in terms of her classroom management techniques. I'd like her style with a little bit more cooperative education.

Then in another interview David said this about his cooperating teacher:

> Here's somebody who is probably mid to late 20s with six years experience. We talked about this in a couple of our meetings so for her this was kind of strange to have someone my age and different experience in the classroom as her student. But I definitely look to her. She has a grasp on the profession that I'd like to continually look to her as a mentor. Beyond that right now, I haven't seen explicitly a certain style that I'd say that's the person that I'd like to emulate, that I'd like to go to if I have an issue with content or I know that this person would be able to help me if I have an issue with classroom management. In many ways, I want to find someone who has some differences from my cooperating teacher. Overall I guess I want to match her style 80% of the way but there's a 20% factor that I'm thinking there's something else. If I totally emulate her then I won't be bringing in myself. So I haven't quite figured out what it is exactly, other than I think it's a little bit more freedom for the students, a little bit more choice for the students, and I don't know someone who can answer the questions of how can I do that better than I know how to do it now.

There were times when student teachers clearly felt more like colleagues with their cooperating teacher. On the video of Suzanne teaching, she is talking with Mrs. G. at one point.

> We were just talking about how fascinating it is to see the different approaches. We were talking about some of them [children], the way they were setting up the graphs and drawing the vertical lines.

When the video scanned the room and caught Mrs. G at her desk, Suzanne commented:

> She's just watching. She told me once that she's just fascinated to watch the kid's behavior because you don't often get that chance because you're in the moment… to just kind of sit back and watch.

Diane and Mrs. M. watched the video of Diane teaching together. To my knowledge they are the only pair who did that. When Diane did her stimulated recall interview she commented on that:

> (Mrs. McC.) was laughing when she saw this. She said, 'I kept saying shhhh. I do that all the time. And do they listen? It doesn't work.'

It was refreshing to hear a cooperating teacher criticize herself in a lighthearted manner to her student teacher.

Oddly, Ann also commented about that same habit. She said that her supervisor "got onto me for saying Shhhhh" (with finger to lips). Ann noted that a lot of teachers do that but she allowed that she didn't know how effective it is.

Diane and Mrs. M. worked together as colleagues with their first grade class, which had many especially needy children. Diane said that the class was big enough for both of them to be working all the time. When a parent requested that a child be given the Connor's Test (a questionnaire used to determine ADHD) Diane and Mrs. M. filled

out separate questionnaires and then compared them. Diane commented, "We were pretty close. There were a couple of things we were different on, but not much." Around Valentine's Day there were two major activities going on in their first grade. They were making a paper quilt to display in the hallway and they were making books. In her journal Diane said, "I was the bookmaker and Mrs. M was the quilt maker."

David expressed appreciation for the extra work that he knew his cooperating teacher had because he was there. Having student teachers is extra work and David was very grateful for that. He felt that everyone benefits from the arrangement, "It keeps the teachers more current and on their toes." It struck this researcher that it would be rare for a traditionally-aged student teacher to recognize and appreciate that extra work by the cooperating teacher. Younger students would tend to take it more for granted as a part of the job.

Eifler (1997) wrote about the tensions among student teachers, their cooperating teachers, and their supervisors. Ann mentioned this tension.

> In some ways my supervisor made my relationship with [Mrs. B] better because we kind of came together against a common enemy.

Generally the feeling most prevalent about cooperating teachers was admiration. Diane said this about her cooperating teacher:

> She stops when a child needs something and calmly listens. As a result she loses things all the time because she puts things down to attend to the child and then forgets where she puts them. I laugh…I mean, what's more important?

Diane understands that this "flaw" is really a strength and that this happens because the priority of the teacher is the children.

Some of the cooperating teachers are more effective as mentors than others. This is an entry from Diane's portfolio:

> After I'd been assisting in the classroom for a couple weeks, I started to realize how effective my cooperating teacher was at keeping the children's attention during seemingly mundane tasks like introducing the spelling words. I was feeling like I was giving a deadpan delivery and getting a dull response. My cooperating teacher mentioned how her first couple of years of teaching she felt like she was boring, but that she started to introduce the elements of teaching to multiple intelligences, and it has really worked. For instance, she'll put the words on colorful shapes, call the children up, make up a rhyme or math problem and try to engage their different senses. She also reiterated that this is first grade, and we need to be especially aware of their budding senses and to try and make sure we're tapping into lots of senses. Most children need to see, hear, touch, and absorb new concepts in order to really learn. I took this advice to heart and have been following her recommendations, and feel like the children are getting much more from me, and responding better.

This entry came from David's journal after about a month in the classroom:

> Overall, I felt much more comfortable delivering today's lesson (as compared to first observation). This is probably mostly a reflection of the number of lessons that I have been able to deliver. [Mrs. P.] has been great about turning over major portions of the curriculum relatively early in my practicum. I highly encourage this approach for all who student teach. We need the chance to succeed…and fail…and recover…and grow, with the help of our cooperating teachers.

By contrast, Ann wrote in her journal about her frustrations, "I would like to try some of the things I've learned about in school or read about, but Mrs. B. seems reluctant to change the status quo." Regardless of age, student teacher/cooperating teacher dyads sometimes work well cooperatively and sometimes there is a 'disconnect'. However, some classroom teachers feel uneasy about working with a student who has considerable life experience. Students are eager to take on more responsibility and use the skills they have already acquired, but are sometimes constrained from so doing because they are perceived, by the classroom teachers, as threatening (Duncan, 1999). This was <u>not</u> the situation with David, who had a cooperating teacher who was approximately 20 years younger than he. She did express concern about the difference in age and life experience (to David's surprise) but this was not apparent in her actions and in working with David.

This would indicate, that even when the cooperating teacher is younger than the student teacher, the partnership can be a positive one.

The feelings of concern from the younger cooperating teacher about the age difference, in this case, remained hidden. There was no indication from this data that age alone is a factor in relationships between cooperating teacher and student teacher. This would support the research of Meloy on perceptions of cooperating teachers concerning their mature-aged student teachers. She concluded that "experience, maturity (regardless of age), dedication and skill" are more salient factors and that "enabling all preservice teachers to do their best requires communication that is not based on a priori assumptions about age-related abilities and competencies".

In the field experience the student teacher learns by applying all they know, but also by observing and emulating their cooperating teacher. The internal working models, gestalt, perspective, world view, mental model of each, sometimes collide and create tensions, which need to be resolved. At other times these mental models facilitate and support each other. The ideal is a working environment in which student teachers feel free to ask questions and cooperating teachers can be explicit about why they behave in certain ways and why they make particular choices in their classrooms.

Eifler (1997), in her study of nontraditional students, reports that the most significant result is the frequent tensions between expectations of the cooperating teacher, university supervisor, and the realities of performance of the student teacher. Even though these students were older, they were still novices in teaching. There is a precarious balance between honoring prior experiences and the development of knowledge and skills.

Students

The children or students, the content, and the pedagogy, as seen in figure 2 are all important components of classroom teaching and learning. Traditionally aged student teachers are more attuned to their own needs, their lessons, their pedagogy, than to the children. Research says that it is usually the third year before they become more tuned to the children's needs. These mature aged students are different. They are frequently tuned in right away (Bray, 1995; Metcalf & Kahlich, 1998; Powell, 1992; Walker, 1996).

For example, during the first observation in Diane's class she asked if I had seen the boys standing at the shelves below the windows; the top of the shelf was at the right level for the boys to stand up and work. She said that boys and some girls seemed to welcome a chance to stand and move around more. She felt it was related to the need for movement and perhaps even hyperactivity. Diane has a second grade boy herself and so seems to be tuned into their need for movement. It would be unusual for a young teacher just out of school to understand this at the student teaching level.

"Meeting the needs of children" was the value that participants rated at the top of their ranking of classroom values (Appendix I). They ranked it above content, pedagogy, and even classroom management. David said in one interview, "this is not about me, it's about those kids."

The second interview, which focused upon stimulated recall with the classroom video, was further proof of that. Their comments, upon seeing the video, were generally more about the children, and how to reach them, than about themselves. The comments were sometimes about the children as a class but more often about individual children and their needs.

The exception to that might be David, although he too had many comments about the children. His comments, upon seeing the video, were reflective and focused very much upon how he could improve nearly everything that he did. Perhaps that is because the group that he was teaching on the video were not his class and he barely knew some of the children. Perhaps too the instructions to him differed slightly or perhaps his perception of what the researcher wanted was slightly different.

Generally each participant was in charge of that interview. It was the most unstructured of the three interviews. Basically they were given the remote control and asked to pause the video every time they could remember what they were thinking at that moment.

One thing that the participants seemed to all be mindful of is 'reading' the children. Diane expressed this in the stimulated recall interview, "Uh oh, I think I'm losing them. Have to get them back to their seats. Time for a change in modality." When viewing one of his lessons on videotape, Dave remembered thinking, "I need to bring this to a close. They're drifting."

While viewing the video the various participants had many comments about the needs of specific children. Here, in the participant's own words, are some of those comments:

Ann

> Jimmy is someone who could have done it better just sitting there and thinking it in his head. He's really good at Math.
>
> Here I was thinking oh she's not going to fall off the chair… (Child was standing on a chair to reach the easel to write).
>
> I like to compliment him when he's being appropriate.

Of the three, I think R. was the weakest reader. Because, like I said, he depended so strongly on just the illustrations where S. has got some good decoding skills.

I was thinking how can I give him support, without just giving them the word. How can I help them in a way that's going to help them in the future?

At this point I'm just thinking, they're not thinking or listening. They know what 'ing' sounds like.

David

If you notice his head was kind of down. I saw that he was not working at anything else but I didn't know if he was really listening so I was happy when he answered.

Diane

I don't know if I believe that (one girl said her cat ate sunflower seeds). I remember thinking, your cat eats them? But you don't say anything. But sometimes they just kind of reach for things.

The little girl who was 'checked out' just came back in time to sit for the story. She doesn't want to miss it.

He's a very bright boy. It's good because he likes to talk a lot but he also gives good points and gets the other children thinking.

I do feel like sometimes with certain students you really need to pull things out of them and others you need to let them talk.

One of the girls showed me her snack and she had a serrated knife and it was long like a steak knife. So I said, 'Oh, that's really too sharp for you. I'm going to hang onto that.'

Kathy

He would just like to take over the class [referring to one boy who is a very high energy leader]. It's just important to keep that channeled in the right way.

They even had trouble working together. N. didn't want any part of it. MC has a hard time relating to her classmates and A. does too. So it would be a tough group.

E. has had a tough life. I would say in the five months I was there I don't think I saw him finish anything, not one assignment, not one piece of classroom work. He was there in physical being only.

MC fidgets a lot. The last day I was there Mrs. A [cooperating teacher] was doing a math lesson and MC was doing her thing there with her pencil. That's what she needs to do for whatever reason. Mrs. A. called on her and MC said something so funny. MC was listening and when Mrs. A. called on her she said, 'Boy, that doesn't show much confidence in me.' Very humorous statement and, God Bless Her, she knew the answer.

MC draws a lot on her papers and Mrs. A. doesn't like it. I'm like does it matter? Mrs. A says don't graffiti on your papers. …they're in this power struggle. I think it soothes her anxiety or whatever she's got going on and Mrs. A. says, 'Don't do that.'

Suzanne

He was graphing things from heaviest to lightest and we had talked about how you read things from left to right and it was like he had forgotten how you read from left to right. It was interesting.

That one little girl is always playing with her shirt, putting it up over her head, taking her arms out of her sleeves.

He just asked me a question and I probably didn't give him my full attention and you could see when he walked back to his desk his response. He didn't quite get the answer he was looking for. So you can see how important it is. You give them your attention for that moment that they're asking and make sure that they get it because clearly, now that I see it [on video], he didn't get the answer that he wanted. He's wandering a little aimlessly and his whole body language [shows it].

He's very self-conscious about his work. He didn't want to work on it in front of his friend so he did take it home.

I wanted him to come over because he was bothering a girl that was at his table. And I probably could have just as easily moved the girl because a lot of times she's talking to him. I was thinking about that as I was doing this because I need to pay attention because it's not always the little boys. Sometimes it's the little girls who get them in trouble.

He has a hard time getting his work done because he spends a lot of time talking and getting the other kids going. He would complain that people at his table were making noise and he couldn't get his work done but then I watched him, he's the one.

I notice he tends to ask a lot of questions. It takes him awhile to get going.

> And this little girl is always very concerned about what she's doing and she always wants validation that what she's written is good.
>
> Her answer was right but I should have rephrased it for the other kids because it took a long time for her to get that out. She answered it in a very roundabout way but then I just kind of went on to the next thing as opposed to acknowledging what she had said.

Just as this research looks at the life experiences of students becoming teachers, participants are mindful that the children have experiences outside of school and, even in first grade, are not 'empty vessels'. This is what Diane shared:

> I usually like to tap into something they know so that they're engaged right away. With the sinking of the boat story 'What do you know about boats?' get a few of them thinking. I like to do that. Just to kind of hook them in a little bit. Some of them really don't have any of that background knowledge. So they're just kind of sitting there listening to other people but they're learning from someone else's experiences. But you know it's helpful. You have all different backgrounds. We had done something about what we know about boats and I was actually amazed at how much they knew.

Content and Curriculum

Content is one of the first things that students struggle with as they learn to teach. They learn to do lesson plans, usually according to a template prescribed by their educational program to insure that they are attentive to all elements of the lesson. They stick close to these prescriptive lessons at first and then gradually move away from them as they realize that there are so many other things in the classroom to which they must attend that they can't be dependent upon this paper with the lesson plan written on it. As their confidence builds, they put more and more of themselves into the lessons and the planning. David made a comment about using the scripted lessons in the texts:

> ...let's say I'm doing an Everyday Math lesson I tended to rely heavily on the lessons in the book and I review them in the book. I was mentally prepared for

> them but I did tend to read from them, whereas when I prepared my own...I did a history lesson that was completely my own lesson. The concept was derived from the curriculum but it was purely mine. I know it. I was not reading from anything. It was much more natural.

Ann made a similar observation:

> I taught a couple of my own lessons and it was straight from the textbook and I found out I'm very uncomfortable teaching from the textbook. It's hard for me to understand exactly what they're supposed to be getting from the lesson. When I write the lesson I know what the objectives are. When I'm teaching from a text it's sometimes hard to understand that. They had a science text but I didn't teach from it. I didn't teach science until I had my takeover [full time student teaching] and I tried to teach the same things that they would be learning from that but just in my own different way which I was much more happy with.

One of the questions this raises is how do these mature-aged students compare with traditional students in their desire to teach in their own way and not use scripted lesson plans?

In regard to bringing their life experiences into the content of the lesson David said:

> ...I think I have found the ability to bring to it [classroom] a lot of different real life examples to the content that we're describing. The kids like that. I think that's something that is engaging.

When participants were asked what energized them in teaching Suzanne said that she is energized by the creative aspects of teaching. She described that as finding resources and then thinking about how to present a lesson.

In summary, all background content is relevant. The teacher who has taken a course in the study of geology has more to say to a child who brings in a rock than "That's a pretty rock." Such a teacher is better equipped to ask a question or make a statement that will result in increasing that child's sense of wonder about rocks.

Science

As David described how he prepared for one science lesson, it seemed that his approach was definitely related to his maturity.

> ...when I went back and very carefully, very methodically worked through the material, just me going over the lab as suggested, I got it and it said to me, don't presume that because you're a 44 year old you can just look at the start of the lesson and the end and say I'm supposed to know this and therefore I know it. I didn't know it. And so I had to work through and show it to myself again. Then, in part because I had to learn it again, I really enjoyed teaching this because I could really feel, I could see when they were getting it, I could see when they weren't getting it because they were where I was the week before when I was trying to get it.

These participants believe that the curriculum should be challenging to children. But they struggle, as experienced teachers often do, with how to determine what is too easy and what is too difficult. Sometimes their preconceived ideas about curriculum guide them. Ann, who loves science, feels that children do not need to have content overly simplified for them.

> In science they were studying life cycles and instead of saying metamorphosis they would say complete change. The teacher did say that's called metamorphosis. And all the kids chose to say metamorphosis. Then too they were saying food tube instead of esophagus. Kids can remember esophagus.

Her own love of science and using the proper terms probably translates into feeling secure herself with science and with introducing the correct terminology right at the start. Other times student teachers just have to learn by experience what the proper level of difficulty is and that differs with each class and with each child.

Diane must enjoy science too because she anguished several times about the scarcity of science in her first grade classroom. In a journal entry for January she writes, "Already we've bumped science, a unit on Solids and Liquids. This keeps happening and I know flexibility is critical, but it really doesn't seem like there's enough time in the

day." February: "We haven't been spending any time on science, this worries me." In March she writes, "We made it to another Friday and still haven't gotten to the science. I hate to keep bringing it up, but clearly it's getting pushed back once again."

Language Arts

In teaching reading some participants had criticisms. All recognized the importance of reading and writing, especially those placed in the lower grades. Ann said, "...communication is the most important thing." Ann was disappointed with the traditional type reading program in her first grade classroom. The teacher did five groups, took turns reading and didn't do a lot of discussion afterwards. She said, "They just get their books, take a turn reading a page and then they're done." She also found that even with silent reading the children in groups are competitive. They want to be the first one done so they don't stop to figure out words or to decode them. They just skip the word so they don't lose time. Ann also felt that there was not nearly enough teaching time for language arts in general. She would often choose a student to stay after the group and read just with that child. She tried to pick kids who she thought weren't actually reading and she tried to pick somebody different each time.

Ann, speaking of her peers in college, feels that poor writing is the "biggest thing I see with college students". She says that the same mistakes they make in college are the same ones they're making in first grade:

> They lack organization. They don't plan. And it's boring because they don't have the details. Those are all things you see in first grade. It needs to be worked on starting in first grade. The writing process...don't just write something down and that's it. You need to plan it. You need to go back to it. You need to have different writing for different things you're writing so it's not all the same. You

> need to start then and maybe when you get to college you'll have that foundation and be a good writer.

Diane criticized the language arts in her first grade classroom as well:

> They still will write without capitals. And it's almost end of first grade. That worries me a little bit. I don't think we have them read back what they wrote enough. We collect it but they don't really look back at it and have to…It's the chance to reread what they put down. They have ideas but we don't always have the time. We should make it though.

Diane's work as an editor is showing. She recognizes the value of reading back over your work and editing it, perhaps several times.

Kathy, who was a librarian, explained how she determines level of difficulty with helping children to select a book. She asks them what they are interested in, pulls out a book, and then asks them to read a page to see how it feels. But she is mindful of not giving too much direction because she wants them to learn independence and to feel comfortable selecting their own book. She gave, as one example, a girl who always asks for a Harry Potter book, "…there's one little girl and I just cannot dissuade her from taking them out." Kathy knows this book is too difficult for the child but she concluded that "if that's what she needs to take out from my library to make her happy, then I let her do it."

Beginning teachers have to learn too that there are certain words or areas that are best avoided. Much of that is simply learned from experience. Those who are parents do have an advantage here. Kathy said that she was giving a spelling test with the word cherished. She said, "I cherished that Teddy Bear." That sentence "just set one kid off. He thought it was the funniest thing. It seemed so innocent. He thought it was hilarious."

One of the more difficult parts of planning lessons is estimating the time allotment. So the student teachers learn very quickly that they need to have extra activities planned in case the lesson takes less time than they expect. Experienced teachers have many ways to fill in time if they suddenly find they have just a ten-minute time slot until a prescheduled event such as lunch. As the practicum proceeds these developing teachers get better and better at estimating time and having other activities in mind that are not just busy work but make use of valuable classroom time.

David made several references to time allotment when he was recalling what he was thinking as he did the standardized achievement test review with fourth graders. He said things like, "…this stuff is not stuff they have to remember. I'm spending too much time on it"; "…I was thinking I'm going down a rat hole again…too much detail for what these kids need in two hours", "Again, I felt maybe a little too much information, a little too much detail."

When David was asked what subjects he most enjoyed teaching he said that he expected it to be the language arts lessons. He did like them and spent more time on them than anything else but he found he really loved teaching the math and science. He related that love to his former jobs:

> Most of my career I worked with engineers and worked in areas where there was software engineering. It's always been [in management] but I've worked very, very closely with engineers. I was surprised at how much I enjoyed relearning some of the grade school science and then getting to teach that and having such fun. We did a lesson on simple machines and I just had such a blast with it. I was having difficulty with a concept and had to do the experiment myself a couple of times because I felt actually that the materials we were given were rather weak.

Math

Leinhardt & Smith (1985) in exploring the nature and structure of teachers' knowledge and its use in mathematics teaching suggested that teachers think in terms of activity structures in the lesson and in routines such as passing out papers. The participants reflected upon the math programs in their schools and none were enthusiastic in their assessments. Several participants criticized the adopted math programs. Suzanne felt that the Math program in her school was weak:

> I like it [math program] but I think it's incomplete. There are areas that need to be reinforced. There's such a tendency because of the way the program is designed to just rush through and get onto the next thing. Kids get frustrated because they're not getting it and you don't have time to stop and make sure they get it. It's designed to be cyclical [spiral curriculum] and you'll come back and you'll get it later, either as the year goes on or another grade. So that part was a little frustrating. I could see a lot of them getting frustrated with fractions. They have the manipulatives, the fraction cards, the games. There's a big emphasis on games in that and sometimes I don't think the games necessarily help. Some of the games are kind of confusing.

Diane reflected on her math program and she felt it too was lacking. Frequently they expressed feelings that concepts were too rushed. There were tensions between true understanding by the children and "covering the material."

> There are a lot of these workbook pages and I just think that it is really dull. When they use manipulatives and do explorations, it was great, but to get them to work on those pages where sometimes there were four different concepts and they would have to do them. There are some real disasters. You could read it but then half the class would be able to do it and half the class wouldn't. So even with the two of us we were often not able to get to everybody and not get them understanding it and for those who got it, it was really boring going through it inch by inch. So I found the math challenging.

Diane did like doing a math message each day. In the morning there is one math problem for the children to solve. They all discuss the possible solutions. She gave an example: "There are red fish and blue fish swimming in a pond. There are twice as many red fish

as blue fish. There are 15 fish in all. How many red fish and how many blue fish are there? Draw a picture." Some children got it right away. For others, it was necessary to break it down and go through it step by step or use manipulatives.

Sometimes the student teachers were unsure of the content that they were teaching and they were not afraid to admit that. Kathy said that one day when she was teaching she completely blanked out how many days are in a year. She was thinking 365, leap year 364 or 365. Is it a regular year or a leap year? Add a day, subtract a day. She handled it by saying "we can double check that."

David too questioned himself on the pronunciation of a word. The word was Mohs, referring to a rating scale for rocks and minerals. He spelled it when he referred to it in a lesson. But then later he berated himself for not looking it up before the lesson. He said that one of the differences between doing that in an elementary school classroom and in a business setting is that if he didn't know the term in business it would be truly embarrassing. In classrooms, for the most part, children do not pick up on it.

David talked about putting pressure on himself to make sure that the kids mastered the material he was teaching:

> On Math, I was putting all this pressure on myself that the lesson says they have to know the area of a rectangle after this class. They have to know it. If I fail at this what do I do? Do I get stuck here and keep going over it with the same kids who don't get it and remodel what's happened to the kids who got it?

What made him feel better was a conservation with the assistant principal in which he had an 'Aha' moment. She talked about how the curriculum is a spiral curriculum and it is cumulative in each lesson. There are skills that they master or that they're being introduced to. All of the kids are not going to get it, and if it's at the mastery level then 80% of the kids will get it.

This doubting of self is common among mature-aged student teachers. The college field experience supervisor of two of the participants shared that these older students usually know more than they think they do in contrast to the younger students who usually think they know more than they do. It makes one think of the ancient admonition: She who thinks she knows does not know; she who knows she does not know, knows (Schubert & Ayers, 1992).

David remembered the same doubt in a business setting…a slight insecurity. Is this a negative that people with life experience bring or is that insecurity actually a positive? These people have been humbled by life's experiences. Traditionally aged students have yet to go through that. Maybe it happens sooner when you're not isolated in a classroom.

Pedagogy

The study of pedagogy was introduced with the advent of the normal schools. Normal school training initially took place at the high school level and usually included a post year of practice teaching in a campus lab school. Prior to this, elementary teachers were required to have only elementary and preferably some high school education. Women comprised 30% of teachers in 1840. By 1920 86% were female (Schwartz, 1996). By the time of World War II, most normal schools had become four-year state teachers' colleges that granted bachelor's degrees in education, with various subject matter and grade-level specializations.

Each participant had a story to tell about a teacher that they admired whose main characteristic that made them outstanding was enthusiasm. They described teachers who

obviously loved teaching and were excited about what they were teaching. Suzanne mentioned creativity (in pedagogy) as well as enthusiasm.

> Ann was telling about a book about exemplary first grade classrooms.
>
> In there they had the qualities that they observed in these exemplary classrooms and one was the students were really self-sufficient in those classrooms. They knew what they were supposed to be doing, when they were supposed to be doing it. They didn't need so much direction and direct observation all the time so the teacher was more free. That's what I would like to have in my classroom. As a parent, I think your job is to raise independent people and as a teacher I think you should be creating independent learners, people who know how to find information on their own.

Ann mentioned that she likes things organized, both in the classroom environment and in her teaching and learning:

> I think when I'm teaching I always like to present everything in a prepared, organized way because that's how I learn best. If information is jumbled or confused, and I've had teachers that way, it's difficult for me to learn. I can't remember things if I can't connect them. So I need it presented in a way that the connections are clear and I can see it. It's got organization. That's what I always try to do.

Participants are trying to bridge the gap between theory and practice as they student teach. David remembered from his math classes to try to let children develop the formulas on their own after presenting many examples. He was teaching the rectangle method of determining the area of a triangle [a triangle is actually half a rectangle so to find the area halve the formula for a rectangle]. After two days most of the students got it and then he presented the formula. He had a kid raise his hand and ask, "Why didn't you tell us this at the beginning? Now I get it." David reflected that some kids did get it and if he had just given them the formula up front, maybe they'd never have gotten it. But, he allowed, "this kid, he needed that formula."

David, while talking about the concept of billions of years in geologic time, wished that he had thought to bring in a visual to drive the concept home:

> I wish I hadn't brought up that example because these children probably never saw that visual. I'm bringing up something very intangible to them. Actually, I was thinking I wish I did have some kind of a time line where I could show them human life versus four billion years.

Another time Dave expressed that he wished that he had brought in a sample form (template) to show the children what he was thinking. He was explaining the instructions to the students and it wasn't clear enough to some until he provided one-on-one directions.

There was evidence that some of the participants were already able to vary a lesson based upon knowledge of the group of children that they are teaching. This story is from David, who is comparing his experience of teaching a lesson on rocks and minerals to two different groups of students:

> This is a group of kids who are very studious. The last lesson I gave was to a group of different students, many of whom had 'ed' plans [IEPs or Individual Educational Plan]. It was such a different experience. What I ended up doing was thinking I cannot do this up front. I cannot start out with a lecture. I will lose them. With this group between the Power Point presentation and having the sheet in front of them where they circled it [critical information] they stayed relatively engaged, using the Socratic method, asking questions, getting answers. With this other group I was thinking this is not going to work. So what I ended up doing was showing them the video first, like watching TV. The video was professionally done. So I did that first and then instead of having a discrete session where we do the Venn diagrams that compare and contrast I had that incorporated into going over that test with them. I tried to break it up more than I did for this group.

Classroom management

While classroom management is usually a challenge to student teachers, all of these participants appeared to adapt quickly to their classrooms and felt relatively

comfortable, after the first lesson that is. Their journals and interviews, however, revealed many insights with their actual struggles to make meaning of what they were learning and the ways in which they questioned existing practices and themselves.

Diane, in her journal, reflected that she is not fond of the way the computer is used in the first grade classroom. She says, "I think we really need to restrict it somehow so that it's not like TV watching. Also, the same couple of kids muscle in and take over. We should have a sign up and time limits. I briefly mentioned this to Mrs. M and she agreed."

Suzanne found that she would often stop to pick up pieces of paper on the floor rather than just leaving them and she would stop to push in chairs. When asked if her cooperating teacher did that (thinking that she was modeling after her) she said that she did not.

> I was joking because they have the little juice box straw wrappers. After snack, there're all over the floor. I said, "If these were dollars I would be rich." After awhile I started calling them dollars. Look at all these dollars on the floor. So after while it just made them think…I see them on the floor and I have to pick them up. I saw myself, when I was viewing the video, always stopping to pick up paper, pushing chairs in, that sort of thing.

Both Ann and Diane were in first grades and both discovered that taking turns can be a tedious process. First graders all want a turn. Ann said, "…it's hard because you want to give everybody a chance. Then it's hard to get everybody to wait patiently so everybody can have a chance. Because they're patient until they get their name and then once their turn is over they're like OK I've done that." Diane said, "I really like the active participation but the only problem is they all want a turn. You can't always get 22 of them. I tried to go boy-girl-boy-girl for awhile and then I think at some point I had to just keep calling." Sometimes student teachers learned that a hand would go up and the

student, when called on, would not know the answer. Suzanne had a child like this in her class,

> Her hand would always shoot up and I'd call on her and she'd never know the answer. It was just a reflex; a question's being asked so I'd better raise my hand. But the answer hadn't formed in her head.

Grouping children for instruction was something that Diane questioned. She said that she disagreed (with her cooperating teacher) with some of the grouping methodologies:

> So I never felt like I was getting the groups the way I would necessarily want them. That was one of the things...I don't think I would give them so many choices. It took a long time and they would quibble and somebody's feelings would be hurt. I definitely felt like I'd be a lot more structured about that kind of thing. But I didn't refine it yet either so I don't know if it would have worked.

Ann was happy that her teacher was so easy going and that it was a comfortable kind of classroom but she also felt that a little more organization would be an improvement. When asked what she would change in her classroom this is how she responded:

> I think I would have things organized a lot more and have things accessible to the students, things like composition paper. It shouldn't be up on some high shelf. It should be out. Students should be writing all the time. It seemed for everything we did there had to be some sort of printed out paper for them to write their answers on. I really don't think that's necessary. Just write it on paper. It doesn't have to be on some worksheet.

Ann also felt that more routine should be established in the classroom so that the students know what comes next.

> I think I would want all the time filled more, have more scheduled things. A lot of times on days when they didn't have specials for instance, like on Tuesday and Friday, there's a whole hour in there that she would just randomly fill with things. I would have scheduled that with something...like more writer's workshop or something. Then too I think you fit in more quality time than you do when you just randomly pick something. Also so they know what to expect. It helps with classroom management.

Diane observed that it is important to constantly remind children 'of this age' [first grade] "what we're doing, even if we said it that morning. Today we have a visitor coming. So remember today I told you we had a visitor coming. Mrs. McC. does that a lot. She's very good at that. Remind. Remind. Revisit. Revisit. Remind. Remind."

Suzanne found the same thing with her second graders. She said, "But I find that with this age especially you have to show, model everything, give examples, repeat directions, have certain kids repeat it back to you."

David told a story, during one interview, of a math class in which he was teaching about subtracting negative numbers. He felt that the kids just were not understanding it. He said they were using mainly worksheets and problem solving, a little bit of Socratic method of questioning. There was a number line at the top of the board that he was using. He planned a lesson with lots of hands-on solving with subtracting negatives. It turned out that there were six adults in the classroom that day: two aides, some 'floating' aides, the cooperating teacher, the principal for awhile. He describes how he felt:

> What I thought was, there is a level of noise and I could not figure out whether the noise was coming from the teachers helping the kids, the kids helping each other, or the kids off task. I was very uncomfortable and found myself struggling with... is this a moment to pull the trigger with our classroom management and try to start targeting kids off task? If they're off task they get a reminder, which is an official slip that they get that takes away some privileges at the end of the week. I was struggling with this during the lesson. I found myself thinking about that, myself getting almost off task.

Behavior management

At the beginning of her practicum Suzanne was worried about behavior management:

> …making sure the kids, not so much like me, but respected me and listened to me. At the beginning I was concerned that they would not listen to me. She's not our teacher…and just getting their respect and getting them to listen.

Kathy, in one of her first journal entries, says,

> There are some unproductive students in the class and I am curious to see how this plays out over the next few weeks. I am interested to observe how these students are encouraged to complete (or in some cases even begin) an assignment and take responsibility for their schoolwork.

In a later entry in May Kathy observes that there is a "direct connection between how kids feel and how they behave. When kids feel right they'll behave right." Then she asks a rhetorical question, "How do we help them to feel right?"

Participants were mindful of what the children would do when their assignments were completed. They have linked idle time and misbehavior. Ann, as explained above, felt that there should have been more choices in the classroom besides the 'browsing box' with books to read. Dave said reading was the 'default' in his classroom but he wanted to include more activities too.

> I tried to do a couple of lessons where I'd say go ahead and it'd be optional worksheets that all the kids didn't have to do but once they finished one they could move on into a more advanced [worksheet]. Actually Everyday Math was good in this way. It had all these enrichment activities that I could direct the kids towards. So that's helpful but it's still not the same as being able to directly interface with the kids one-on-one.

Ann purchased a set of Brain Quest questions for her first graders. The set includes language arts, math, science, and geography questions.

> Now when students have a few minutes with nothing to do, I challenge them with Brain Question questions. The students enjoy attempting to answer these

> questions, and they are productively occupied rather than being loud and out of control.

Ann also realized that while children may talk quietly while working in groups, things can get too loud with the volume in the classroom ever rising.

> At these times, I have started asking the students to stop and listen. I have had them practice speaking quietly so they know what the classroom should sound like. When they listen, they realize that they are too loud and begin speaking more quietly.

Ann feels that she is helping them to learn to control their own behavior this way and that this works better than telling them to be quiet.

Both Ann and Kathy talked frequently about a particularly challenging student in their classrooms. About halfway through the practicum Ann makes this journal entry:

> It seemed like I spent the entire day with A. today. He was in my reading group. Then I had to give him his social studies test that he missed. Finally, I had to sit in the classroom with him over lunch because he was being punished. There are lots of days when I think he is the worst kid ever. When I spend time with him one-on-one, however, it's possible to see that there's actually some good in him. I feel sorry for him a lot of the time because he so universally disliked by the school personnel but he behaves so badly most of the time that it's tough not to dislike him.

At the end of her practicum Kathy speaks about E. and how disrespectful and challenging his behavior has been. This is what she said about him in an interview:

> E. has had a tough life. I would say in the five months I was there I don't think I saw him finish anything, not one assignment, not one piece of class work. He was there in physical being only.

Suzanne wrote in her journal about a class trip to a Planetarium. There was one student who would shout out at inappropriate times, and get out of his seat. In the dark it was difficult to see him. From this experience, Suzanne learned, "I made a mental that in future similar situations children who may act inappropriately should be seated next to a teacher or chaperone, and be seated near an exit – just in case."

Class size, one-on-one, and grouping

Other participants also mentioned the value of one-on-one teaching. All felt that small class size was a very important factor in providing quality instruction. This seems to be especially important in the lower elementary grades. The cooperating teachers often used the time that the student teachers were teaching to provide individualized instruction and vice versa. In this way student and cooperating teacher often worked together as a team. The first grade where Diane was had 22 children, which is large for a first grade. Diane said, "There were days that a couple [children] were out and it helped. It was so much easier. It really did make a difference."

During the last week of her field experience Diane was asked to do individual reading assessments with the children. She realized later that the main objective was to get her out of the room so that teacher and children could plan a 'last day' party for her.

> It was literally sight words and things like that…three pages and you read these which every now and then you have to do to see if they know it. There were some who, out of context, really had a hard time. So that was interesting. You don't always have the time to spend ten minutes with somebody so it was actually very valuable. I think I would definitely incorporate those more regularly than I saw them being done. Just because I think it does provide you with a lot of insight. We don't often get that one on one. You know, you want to be it all for every student. That makes me a little depressed. I'm sure you can't be.

So again this was a validation of the importance from a participant of class size and one-on-one instruction. The student teaching experience really brought this home to these people.

> Regarding class size, David is now well aware of the impact of too large a class.
>
> As good as the teachers instructional practices could be, as strong as the curricular materials, as many aides and assistants as you could have come in the room,

which are definitely a benefit, the main teacher/student ratio is so important. I just felt it myself.

When David was doing the test preparation lesson on rocks and minerals he had a group of fourth graders pulled from all the fourth grades in the school. Only a few of the students were ones from his class that he knew. He commented that it would have been good to have stick-on nametags "for the kids because most of these are not students in my normal class." It was easy to picture a business conference with people all wearing nametags. In schools this is sometimes a first-day activity.

David questioned one of the practices of team teaching:

> I always thought, as a parent, that this notion of switching rooms at the elementary level, you know from 4th/5th grade for things like math and science or history, for one or two subjects was a good thing. I almost didn't question it at all. I really thought it was a good thing for a variety of teaching styles… expose the kids to that. I still think it's a good thing but one definite downside…R. was the social studies teacher. Another teacher was the science teacher. So R's room had history material. J's room had science material but R's room didn't have a science area, none. J's room really didn't have a history area or social studies area. I know one of the professors took us up to [a school in a different town]. They had some very clear delineated stations and the kids, when they finished their work, they would go to these areas. That's kind of missing when you shift rooms unless you consciously build something. So I was actually thinking when I do get my own classroom, even if we are swapping, that I'd like to have all of the subjects represented in the classroom.

Eifler (1997) found that cooperating teachers and other adults in the school tended to expect more expertise in pedagogy from mature-aged students than from traditionally aged ones. They tend to forget that even though they advance more quickly through the developmental stages of becoming a teacher (Metcalf & Kahlich, 1998) they are still novices in the classroom.

Classroom Values

Participants were asked to priority rank a list of classroom values, representative of schooling in our culture, with #1 being of highest importance. The results can be seen in Appendix I. Clearly the top classroom value was 'understanding of children and their needs'. Tied for second place was 'communication' and 'fairness and equity and justice'. These are the very qualities that the participants had mentioned that they had learned from job and parenting experiences. There was a three-way tie for third place among 'classroom management', 'constructivism and self-discovery', and 'enjoyment of lesson'. Seventh place was 'pedagogy.' At the very bottom was 'test scores and assessment'. This may be a reaction to the present emphasis on testing (arguably an over-emphasis), which for many educators, is at the expense of in-depth learning and the task of educating the whole child (including music, art, physical education and other subjects that are not tested). See Appendix I for the ratings and average of each classroom value.

When student teachers were asked in the interviews what a visitor to their classroom would see when they watched them teach, each began with "I hope they would see..." Is this tentative phrasing because of the breach between theory and practice, or is it because we have such difficulty complimenting ourselves? Or maybe it's because they are still so new to the field and still changing and developing that they are not sure what this make-believe visitor would see.

Context Beyond the Classroom: Budgets, School Culture

Participants are all parents with school-aged children. That life experience as a parent appears to translate into a greater awareness of weaknesses in the schools and in the system, in general. Additionally, they now have gotten an "insider's view".

School systems and budget concerns

Awareness of budget concerns was something that several participants commented on. Suzanne wrote in her journal about children's work in the computer lab. She said that they were allowed, when their assignment was completed, to play on the computers. One child created a very impressive picture of a surfer catching a wave. However, the technology teacher did not allow the students to print out their drawings. Writing from a parent's viewpoint, Suzanne commented, "The parent of this one child would have been proud to display their child's artwork." Then she wrote from the viewpoint of a taxpayer and parent of children in the schools:

> Obviously budget constraints prohibit color printing. And of course, paper is a scarce resource. Mrs. G. informed me that there is not a lot of paper available. She is only allowed to make 22 copies for her class, and when her paper is gone, that's it for the year. As a parent and taxpayer, this makes me angry that basic supplies are in short supply in our schools. It is also an eye opener in terms of what I will soon face when I have my own classroom.

In another entry Suzanne notes that Open Circle is a new program that has taken the place of the health curriculum (another casualty of the budget cuts). She feels that this program, which stresses conflict resolution skills, provides valuable skills for children but she says,

> I question the total abandonment of the health curriculum in lieu of this program. I think it is equally important that young children learn about proper nutrition, and the individual systems of their growing bodies.

It may be worth noting, in order to further establish a context for the current times in public schools, that this particular school system is located, not in an inner city, but in one of the wealthiest suburban areas in the state.

Diane has been active in her community and her children's school. She was talking about the budget cuts in the school system in her town:

> …I told you about the copiers [they're being reduced to only one in each school] and apparently there was a letter that they're probably going to close one of the schools in this town. And they're all brand new schools. They've all been renovated and rehabbed so they're just beautiful, beautiful buildings. People are all excited about that. Of course, that doesn't put me in a very good position either…non-tenured teacher in training. There're all these teachers being reassigned.

Ann is moving to a new state after she graduates and she was talking about how impressed she is with the schools there. She says, "…the property taxes are kind of outrageous but I think it's going to pay for decent schools. I'm willing to pay that so my kids can go to a good school."

As a parent, and now as a teacher in this new school, David ruminated about a perceived design flaw in the structure. The school site contains both the elementary and the middle school. There is some shared space between the two. The cafeteria preparation space is shared. The gymnasiums are connected and separated by a glass block partitioned corridor, open at the top and bottom, through which the elementary children pass to go out to recess and the middle school students pass to go to the gymnasium. David commented, "To me, it's an obvious flaw in this because the kids should be separate. Middle School and Elementary should be separate". He thought about it because the only space available for his test preparation lesson on rocks and minerals was in the elementary lunchroom right next to the glass brick corridor.

The other thing that bothered David about the new school is that it is brand new and it's "at 100% capacity right now." This he said is because everyone wants to go to a new school and they accommodated redistricting. He said that there's a population bubble now working through the school system and it's projected to go over-capacity. He attended a community parent meeting about the problem.

> And the business manager came and there were both teachers and parents at this meeting and since I kind of have both hats on I tried to be careful but he made a comment that nobody reacted to. I probably should have just spoken my mind. His comment was people are saying we think the classes are getting too big and we should think about a mini-redistricting to get them back down because some of the other schools have slightly lower ratios, not great, but slightly lower ratios and he said "well, what's your complaint, you're within the school committee band width, the high and low that they target". The high might be, I think the high for fifth grade might have been 28 or 29. The low might have been 23. He said that and I'm thinking…that's not an ideal. At some meeting they said we know we can't raise the budget more than X so we'll settle for a maximum of 28 to 29 per class. That's not optimum. So don't question whether I can complain….can't we do better?

David talks about the brand new school in which he is student teaching. He is very aware of the potential of using high tech equipment in the classroom. He was disappointed in the lack of audio-visual thinking in terms of the design of the classrooms and some of the equipment. He said there is no projector that you could connect up to a PC. There is a room for that but "it is 100% dedicated to the technology specialist and there are always kids in there." The TV software, he concluded, is good but when you think about what's available, "what I had available in business…we had three of those projectors. There was never a shortage."

In a discussion, David commented upon the value that society places upon those who work with children:

> Society values it, not monetarily, but in other ways. They provide this opportunity for people to teach their kids and have certain respect in the

> community and as much as public servants are vilified in terms of oppression and unions…overall I think people still respect public servants as being police, fire, and teaching. So while society may not pay the elementary or preschool teacher a lot of money I think they're held in high regard. Certainly by parents. And certainly by parents who are very consciously thinking about how they want their kids raised.

School Culture

Gossip in schools bothered some of the participants. Ann said even before student teaching, just from her experience as a parent, she could "tell teachers are so cliquish and talking about each other." She resolved to not say anything about anyone ever! Morale seemed to be very low in her school, perhaps exacerbated by the budget cuts. She reflected that it was the whole school: "It's just their attitude, kind of like the school culture. You're just there and it just seems like nobody's enthusiastic about teaching." This did not seem to be the situation in the other schools.

Ann talked about how some teachers are so absorbed by teaching that it's their entire life. She said that she isn't sure if it's a good thing, even for the students. Then she related a story from her parenting experience:

> My kids had this teacher, he was great, I really like him but he would spend so long grading papers because he was so thorough that it took forever for him to give them back, stuff like that, he was so into it. It shouldn't be your whole life. I think you lose perspective and stuff when you're just at the school and that's all you ever think of.

Ann shared she would like to work in one of the base schools. She said that if there are discipline problems the teacher could call somebody's commander and they (parents) have to come in. She herself did not go to a base school but this is what she said:

> I think they have high expectations, behavior-wise too. They don't put up with a lot. I think parents are really involved, especially fathers. Even if they don't live

> on base, they work on base so…they're good with giving time off so they can go on field trips and things like that. Usually in an off-base school you go on fieldtrips and it's just Moms. On-base, it's mostly Dads. Because it's easier for them to get time off a lot of times than if the Mother is working.

These participants may make easier and quicker decisions because of their life experience in many areas but in other areas they are newcomers just like their traditionally aged counterparts. One such area is school policy.

Diane was teaching one day in her first grade when her cooperating teacher was not there. On that day a child brought in a serrated knife with her snack. It was intended to cut up an apple. Diane knew that it was not safe so she took the knife, wrapped it in a paper towel and hid it in the teacher's desk. She didn't know the school policy, nor did the substitute teacher, but she knew she needed to check with another teacher so she asked the teacher next door. That teacher told her that she had to bring the child and go to the principal's office. The principal called the Mother. Preservice teachers, until they have reason to know it, regardless of age and experience, know little of school policy.

In an interview, Diane talks about an environment where she would like to teach:

> I think the best environments are those that are very open…second grade teachers telling first grade teachers what their expectations are. First grade teachers tell them that that's possible.

Diane remarked that she definitely learned that from working in a company. She learned to listen first and try to find out what the other person wants before you do anything.

More important than any particular situation or technique is a climate of inquiry in the school. Asking penetrating questions, probing for alternative ways of doing things, and thinking ahead to possible consequences are a few ways to encourage reflection and an environment that challenges current practices and seeks always to improve efficacy.

Guiding Images

Images and phrases taken to heart often guide teachers in the classroom. Teachers frequently hold images of an ideal teacher, of how a practical science lesson is taught, and what 8-year-olds are typically like – all of which influence classroom action. These participants were asked what images guide them. Each one mentioned particular teachers that inspired them and what they retain from that is not the desire to emulate that teacher completely but to try to adapt a characteristic that they felt made that teacher outstanding. More often than not the characteristic was enthusiasm. Other teachers were remembered negatively and that left an impression of what these developing teachers do not want to be. In addition to images of ideal (or not) teachers they held images of how classroom organization and management should be, what size the class should be, how to use technology, what routines should be in place, and many other guiding images.

Ann's guiding images

If you're bored, you're boring.
Lessons should not be 'dumbed down'. Kids can handle it.
School should be work, not play.
If you're quiet and respectful, you get quiet, respectful children.
I always try to present everything in a prepared, organized way because that's how I learn best.
Classroom routines should be established so that children can be more independent.
The teacher should not always be the one who is the center of attention.
I think it is important, even in the early years, for students to view writing as a process.

David's guiding images

The teachers I most admire were passionate about their subject.
Teachers are the number one resource in schools and should be the top priority in budgets.

Small classes! I'd rather spend it there than technology.
All subjects should be represented in an elementary classroom, regardless of who teaches what subject.
It is smart to anticipate and prevent misconceptions.
When children start to 'drift', it's time to change something.
Teaching is like being a tour guide. The guide brings people to interesting places, describes the places for them, makes it interesting, and helps build their knowledge to do with what they will. And a good tour guide needs to understand the tourists and what their interests and capabilities are.
I'd like my students to see me as someone who is enthusiastic and enjoys what he's doing.

Diane's guiding images

Give constructive criticism without damaging self-esteem. How can you teach them without being critical?
If it's not interesting to me, why would it be interesting to children?
My favorite classes were ones with smaller groups and students talking, not just being talked to.
I particularly like a class where we interact a lot with other students. I do like a collaborative class.
I am very project driven. I like when I have a tangible project to work on.
What energizes me the most is to keep them confident (children) that they can learn and that they can do it.
Teachers are huge role models for children.
I want children to be excited by learning, to try new things, to see things a different way.
As a parent, I'm an educator all the time.
If there's something you want to do, just do it!!
Literature is a good way to introduce anything.
About ten minutes with any one thing works well with them (first graders).
...words. Say it and write it.
Remind them to behave and don't make too big a deal out of it. Just remind them.
...one of the ways to make sure they take something away with them is to give them a little assignment while they're reading.
Uh oh, I'm losing them (student's attention). Time for a change.
Would like others to see her as a teacher who is excited to be there, calls on all the students to get them participating, is not just talking to the students, is actually listening to them, hopefully getting them to do different kinds of tasks, participating, writing, working in groups, working individually.

I would display lots of student work all the time, keep it moving.
I think you're shortchanging a lot of children if you don't try to find out what their strengths are and if you don't let them show that to their peers.
Encouraging, encouraging....especially for the budding writers.
How to encourage without squelching, I've thought about that a lot.

Kathy's guiding images

Accepting that which you cannot change.
She thinks of one teacher where she did observations in teaching reading. "She was full of energy, and really, really enjoyed the kids that were in her classroom."
On the flip side, she thinks about teachers she's seen and teachers she has had and she thinks about what she doesn't want to be.
Books have provided images for Kathy; she mentioned them often.
Particular needy children provide images for her to seek answers.
How can he be "so needy on the one hand and yet so pushy-away on the other hand?"
The quote that she chose for her senior yearbook: "We often grow more by bending with the wind than standing in rigid defiance."
Her favorite elementary teacher had a sense of humor and was more relaxed. She could talk with him.

Suzanne's guiding images

Be passionate about teaching (from a professor in education).
Suzanne is guided by images of two elementary school teachers at opposite ends of the spectrum, one inspirational and one not. One who inspired her had a large old type-set printing press in the classroom. Everyone in the class wrote poems and then type-set and published them. Then the class did linoleum blocks for printing to make pictures to go with the poems. Contrasted to this teacher is one who was described as having no personality, no sense of humor, and no heart for teaching. She just collected a paycheck.
Two inspiring high school teachers:
One 'very enthusiastic' social studies teacher used projects that were real life. He was always smiling and happy. The other taught German. She showed a lot of interest in the students that she taught. She came up with creative activities to learn as opposed to having students sit there and memorize. Suzanne majored in government and German in college.
Suzanne is energized by the creative aspects of teaching...finding resources and thinking about how to present a lesson.
Teaching and learning are inextricably linked in a continual process.
With these children you have to model everything, give examples,

repeat directions, have certain kids repeat it back to you.
Cuts to PE classes are counter-intuitive and ill advised. Amy read
a parenting magazine article where teachers incorporate a daily exercise
routine in their classrooms. She plans to do this too.
On Friday afternoons the children need an activity that is fun.

These guiding images were gleaned from every data source. Some were in response to an interview question and others just came up in the course of answering other questions. Some came from the portfolios and journals. They are included to give a snapshot of what kinds of images guided each participant. They are consistent with other data for each participant. They are probably typical of the type of images that guides every new teacher but some are definitely related to job and parenting experiences. Prior experiences of schooling and the memories of these experiences particularly impact the ways in which a teacher visualizes what is effective or not effective in classrooms. These images tend to persist over time and have implications for practice.

Reflections on Teacher Education Program

At both colleges that participants attended advising was mentioned as being problematic. When asked about what changes in the teacher preparation program would be helpful to her Suzanne said she would have liked someone to advise throughout the program or at regular meetings about what to take when. Once she wanted to take a course and it was only available in the spring. It threw off her whole schedule. She wished she had known that in advance.

Each participant mentioned that the whole degree seeking process for these non-traditional students, graduate and undergraduate, is confusing. They feel that advisement

is insufficient. Frequently they latch onto a secretary who knows enough to help and is more often readily available to them than their professors.

When Ann was asked if her undergraduate experience was a positive one she responded,

> The whole process is so confusing to me. Like my advisor was totally...if I didn't go find out everything myself and make sure that I was on track myself, it would be a mess. So many people take classes they don't need and they can't get classes they do need and nobody told me about the teacher's tests. It's like I find information out on my own.

Diane was in the graduate program of the same school. This is a section taken from one personal interview conducted by the researcher. 'I' is the interviewer and 'R' is the respondent.

> I: I think it was in one of your earlier interviews you mentioned it would be nice to have someone guide you, like an advisor who is available to you?
>
> R: Yeah. We kind of jump around. Over the years (degree has taken her many years to complete, doing it part time) different people have been in that role. You don't necessarily know that that's a fact.
>
> I: So you feel like you're kind of out there swinging in the breeze?
>
> R: Even applying for our license, it was kind of like we were getting this advice and that advice. Finally we just said, can we go on-line now? What do we do? Oh yeah, it's a good idea to go on line. Well OK, then tell us that. So we kind of had to dig out the right information. So now I have to wait. I guess the licenses take like 8-10 weeks minimum.

Kathy blamed the fact that she took her practicum in the middle of her degree work rather than at the very end as most student teachers do on the paucity of advisement. She said,

> Nobody ever said anything and my plan of study was signed off on and everybody looked at it and said OK and even when you're into the practicum I didn't realize that I had to have taken those tests and it was just kind of a coincidence that, fortunately, I did. Maybe it's out there and they think you know it, that it's common knowledge, but in fact...you should have these things before you take

> them...I kind of feel, I mean I'm happy to be doing my practicum but I feel kind of like I'm putting the cart before the horse.

Diane was also disappointed in the weekly seminars that go with student teaching, saying that they were not very helpful.

> It was very scattered. We'd get in small groups and share an effective lesson but there was not really the time to share on a broader level so that was too bad. I had other classes where there was more of that. We were able to get together and...part of it was just the teachers' style. Maybe they felt like it was...our career. I mean this was the last step, that we didn't need that. But I think everybody felt kind of frustrated by the end.

Schooling at a Mature Age

What is it like going back to school as an older student? How was it different from when these student teachers were younger?

Working, even part time, while trying to get a graduate degree is a real challenge for non-traditional students who also have family responsibilities. They find that they often have insufficient time with the strain of sometimes conflicting multiple roles, and sometimes conflicting needs for the family dollar (Dill & Henley; Kirk & Dorfman; Klausewitz). Each participant mentioned in both interviews and journals times when they felt a conflict between family time and the need to prepare lessons or be at school for an evening meeting. Ann, in commenting on the need to be at school for an evening event said, "I would so much rather spend the time at home with my own family."

David mentioned how difficult it is for those who work to complete the degree and do student teaching:

> I think that somebody trying to do this at the pace that I did it, with a career, would be hard-pressed. That's where this notion of the school needing to work with the grad students [comes from]...some of the grad students are in this program for quite awhile. The school needs to nurture that relationship. I've had some discussions with folks who after a while get discouraged.

Several times he said that he was grateful to have a working wife who was supportive of him while he went back to school full time.

Suzanne and Ann also were not working when they did their teacher preparation program, including student teaching. Kathy suspended her part time job as a librarian while she student taught and Diane suspended her freelance editing. Diane is the one who has taken the longest to complete her degree. As she mentioned in the quote above, having several different advisors has been problematic. She spoke of her frustration.

> I think in part it's the way I did my education; it really dragged out for a very long time because I wasn't really sure I wanted to go the whole way but I wanted to take a few classes in education. I felt like it would help in my editing work too. So mine did take a long time. In the scheme of things, it had to. I couldn't afford it because I was paying for it myself. In a way, it was too drawn out. By the time I realized I wanted to teach I thought oops…I still have to keep working to pay for the classes. Didn't really want to be gone two nights a week as it was. So I usually chose one night. That was hard. I wish it had been quicker.

Duncan (2000) found that women used various coping strategies to deal with family commitment and academic pressures. One way in which Diane coped with the various commitments of her life was in the way she organized herself. She had a bag for each part of her life. She had workbags. She had a school bag. She had bags for the various editorial jobs. Then she could put them all away and symbolically put her work away as well. She said that there's a point at which she has to stop:

> I have to cook dinner. I've got to work. All nighters…I can't do that. I used to do that a lot. I used to get up really early in the morning. I'd get up at three. I can't do that any more.

Even though these students have families and only see their fellow students in school settings, they still depend upon each other for support. Diane says, "I have a couple of friends who have also been in school around the same time so I do have some

peers that I talk with a lot. Not so much professors as other people who are becoming teachers because the professors I don't see that often. It's other students."

In regard to the right time to become a teacher Diane said, "There's never the right time. I love the stories about the person who decides to become a doctor at 50 and they go back to school. Just do it when you can. That's the good thing about education; it's never done."

Ann talked about attending college now with younger students. She said that she didn't stick out as the old person partly because people think she is younger than she is. "...it's hard sometimes because I have all these friends at school and they're like in their early twenties living with their parents. All I see them is at school, nothing outside of school." Still she feels there are mostly advantages in going to college now.

> ...I think I would have done well but I think I'm probably doing better now. I mean I think I've learned a lot. I think I learn all the time. Like even on that test, the subject matter test, some of the questions weren't anything I'd learned at school because they were things like earth science, which I've never taken. They were things I'd learned from reading or watching PBS, going to museums, things like that so I feel like I know a lot more than I would have right out of high school.

Ann also said that she thinks she takes things more in stride now. She doesn't think she gets as stressed out over things as she did before. She wants to get good grades but "it's not the most important thing in my life, you know. I always know my family at home is more important than anything that's going to happen in school."

What she doesn't take in stride is feeling like she is wasting time or money. "Every hour is precious so don't tell me I think this will be OK. I need to know for sure." Ann felt this even more keenly than the others because she was planning everything so she could leave when her husband retired. "You can't tell me I need this class when I

really need this other one. ...maybe if you're single and living in the dorms one class might not make a difference."

David mentioned that, because of his mature age, he feels that he received a "certain level of respect from high school kids, my own kids being at the high school" than student teachers who are traditionally aged. He says, "age brings with it, for kids who've had a certain upbringing, respect when you walk in the door."

The younger teachers, he feels, will have that to deal with when they start. He also feels that it will be more difficult for them because "they don't have some of the life experiences that I've had, whether parenting or just knowledge-wise." He was surprised that he could get back into the swing of things so easily and he attributes part of that to twenty years of life experience: "Reading for twenty years. Just the life experiences that they don't have." On the other hand, he felt that perhaps from the content standpoint, they would be better off because they've done it (schooling) on a continual basis, they haven't interrupted (schooling). "They've had this nice straight line from elementary school, high school, college. They've focused on it and now they're out doing it."

Kathy feels that for most nontraditional students who are working and have families it feels like a juggling act.

> Most of us are working and have family...it's a juggling act. I feel fortunate in that my kids are older and I can really make this a priority and focus on it. I need time to be able to go and do this or have time to research this and so on and so forth.

Kathy reflected upon whether it would be easier to become a teacher at a younger age:

> I think it's [thinking hard...continuing slowly and thoughtfully] letting me be who I am as opposed to when I'm younger, conforming to what I thought was expected, that a teacher should do or be. I think the thought was that if I had a

> certain standard and had to perform up to it or live up to it, I feel now that I'm much more relaxed, a lot more accepting of whatever gets thrown my way and feel that I can adapt a lot, an open mindedness, I don't want to say that I didn't have but maybe was afraid of expressing. To say, it's all right, it's all right. I don't think I had that confidence in myself when I was younger.

Suzanne said it was definitely different now than when she was in college. In college she was not the kind of student who would be apt to answer the professor's questions. She was the kind who, even though she knew the answer, "would kind of sit back unless it was one of my smaller seminar classes. But the larger classes I would not be the person who would raise my hand and answer questions and here I find myself doing that all the time." Sometimes she wondered if she was answering too much in graduate school. She felt she needed to let some of the younger students answer questions but most of the time there was no one volunteering (in classes in which there were traditionally aged students). She said that she felt better about herself as a student now. Most importantly, this is something she has chosen to do. Before she took certain courses because she needed them to graduate, but now this is something she has chosen and so she is much more interested in the classes.

She does admit that it's harder with children but she says the pace of the program allowed her to continue but she feels that if the program were full time she could not have done it. Because she is in class only one or two nights a week, her husband took care of the children on those nights.

Participants' Career Plans

All participants, at the end of their student teaching, wanted to stay in teaching. Some of the participants did not mention a desire to do anything beyond becoming a

classroom teacher. In the current less than favorable job market for elementary school teachers in suburban areas, that seems to be enough of a challenge.

Diane is discouraged by the job situation because in her town experienced teachers are being laid off in a climate of reduced taxes and reduced school funding. She said, "I don't believe you can get jobs through the newspapers, especially in teaching. It really is 'who somebody recommends.'

Kathy plans to look for a job as a classroom teacher but she has back-up plans. She has returned to her job as librarian at the elementary school and she is thinking of applying to do tutoring for the state's student proficiency exams. She may do substitute teaching as well.

Ann is moving to a southwestern state where she plans to look for a teaching job. Suzanne is looking for a teaching job in the same community as David. While student teaching she was looking to the future in this journal entry, "I made a mental note that I will have to collect board games, puzzles, blocks, plastic chain links, tangram tiles, dominoes and the like for my own classroom."

David talked about his career plans more extensively than the others. When asked if he plans to go into administration eventually, as his father did, he responded that he probably does in all honesty but it is not his plan now.

> I almost hope beyond hope that I get into the classroom and love it. And I am loving the student teaching. I would be very content career-wise to stay in that role and try to become an exceptional teacher. There is this...and I've read a lot about male teachers especially at the elementary level...there seems to be this expectation that what my career path should be is to get in for some time and then move into administration. I'm not going to rule that out...But every time I think maybe I will get into administration in five or ten years I say to myself why, is that what I think I'm supposed to do? Or is that really what I want? For right now I'm saying what I really want is to be in the classroom....I have that luxury right now at hopefully a young age, mid-40s, to begin to look at it as though I can

> make a full career of it over the next 20 years. If anything I've been somewhat interested in, if I were to think beyond the elementary classroom, I am thinking perhaps trying to get either a history focus or a math focus, make myself available for the middle school or the high school. But then I am interested in keeping at least in the back of my mind teaching at the collegiate level.

Many of David's comments and guiding images sound more like he is looking at teaching and schools from a management perspective and indeed that relates directly to the bulk of his job experiences. For example, David says: "Small classes. I'd rather spend it there than technology. Teachers are the number one resource in schools and should be the top priority in budgets."

Dave says he doesn't have a real roadmap for the next five to ten years. It's a map with several different possibilities on it. The possibilities that he names are (1) stay as teacher, (2) go into administration, (3) move into being a subject teacher in middle or high school, and (4) get doctorate and teach college. Interestingly, I did not see any of the females looking toward administration or college teaching; they seemed to be looking more at lateral moves. Perhaps the imbalance in number of males who go into administration is due, in part, to personal expectations and career plans.

Conclusions

Teachers, especially mature-aged ones, come into teaching with a rich complexity of life and job experiences that they can call upon in the classroom. The skills and knowledge that they have gained are applied in learning to teach. They are applied in communication, content knowledge, and organization, which are all very important skills to bring to the classroom that were enhanced primarily by job and life experiences.

The most salient skill set, however, according to the participants, came from parenting. It was this experience that was instrumental with these participants in the decision to become a teacher. It was this experience that each claimed increased their empathy toward all children and increased their understanding and communication.

It is the conclusion of this researcher, however, that the most important thing that happens is not these obvious skills but the fact that all of these experiences contribute to the constant correction and adjustment of their mental models of the world. The question is, which mental models will rise to the top and become the guiding ones? Will it be that which they are taught in the university, or will it be what they have experienced in their lives as students, or what they experience in learning to teach? Most likely, it will be a blending of it all.

CHAPTER 5

DISCUSSION AND INTERPRETATION

"The compensation of growing old...was simply this: that the...passions remain as strong as ever, but one has gained...the power of taking hold of experience, of turning it around slowly, in the light." Virginia Woolf

Introduction

If we accept Dewey's notion that education is the continuous reconstruction of experience, then it seems reasonable that experience must be examined in order for meaningful reconstruction to take place. Life experience is not a tidy concept. It is messy and uncertain, depending upon imperfect memory and interpretation. It is shaped by cultural and social environments. It is helpful to know how people interpret their life experiences and how they make sense of prior beliefs and values if we, as teacher educators, are to help them meaningfully reconstruct these experiences in light of what is known about teaching and learning.

Perspectives, Guiding Images, and Metaphors

Bullough, Knowles, and Crow (1991), explored the various perspectives of beginning second-career teachers. Teaching perspectives, as represented in categories generated by Bennett and Spaulding, was similar to the teaching metaphors identified by Bullough et al. (1991) in their exploration of preservice and beginning teachers. The teachers were categorized by the metaphors of Bullough et al. into nurturer, expert, caring adult, rescuer, subject matter specialist, facilitator and public servant, among others. Kathy, for example, would probably fall into the nurturer category. Her favorite metaphor for teacher is gardener so that metaphor comes easily to her from her life

experience. Kathy enjoys gardening. The gardener tends the plants as the teacher tends to the needs of the children. Teaching perspectives and metaphors were embedded in the life experiences of these beginning teachers. These kinds of perspectives and views of the teaching self, become important for guiding and facilitating the professional growth of new teachers (Novak & Knowles, 1992; Knowles & Holt Reynolds, 1991).

Guiding images and the behavior of teachers in the classroom are often related to core values: personal values and beliefs, and professional values and beliefs. For example, Diane says,

> The best teachers are constantly learning. The best employees are constantly willing to try something new. The best work environment encourages that. Make it interesting. Make it worth your time to try new things. You make mistakes. That's the big thing about teaching. You do make mistakes. Students make mistakes. You need to understand that you can make mistakes and keep going.

The implicit theoretical perspectives of the participants had to be teased out of statements that they make about self as teacher and about children and schools. These images, varied as they are, operate as "implicit theories" (Clark, 1988); they represent the "subconscious assumptions on which practice is based" (Johnston, 1992, p. 125). Feiman-Nemser (2001, p. 1016) refers to the images and beliefs brought to teacher preparation as "filters for making sense of the knowledge and experiences they encounter." Feiman-Nemser notes that they may also function as barriers to change by limiting innovation.

Images form the mental models that teacher educators and cooperating teachers seek to influence in meaningful ways. Major influences of personal biography are familial, socio-cultural, psychological, spiritual, and historical. The terrorist attack upon

the United States on September 11, 2001 is an example of an historical event that influenced the actions and decisions of at least two of the research participants.

Powell (1992) in his qualitative study of 25 nontraditional and 17 traditional preservice teachers used concept maps, in addition to stimulated recall interviews of peer lessons, to learn about the influence of prior experiences on pedagogical constructs. He categorized the level of influence using percentage of references in the transcripts and concept maps. He found, not surprisingly, that content knowledge from past experiences (41%), was the greatest influence upon pedagogy for nontraditionally aged students and traditional students alike. The second greatest influence, based on percentage of references, for the nontraditional students was teacher education (32% compared to 25.7% for traditionally aged students). Additional influences, in declining order, were beliefs/values (24.6% compared to 4.7% for traditional aged), prior work (21% compared to 1.5% for traditional aged), learning style (13% compared to 7.4% for traditional aged), parenting (12.4% compared to 0% for traditional aged), and tied for seventh place influence were three, all at 12%: students, personal needs, and non-classroom teaching. K-12 experiences were next at 10% followed by relatives in teaching field (5%) and college experiences (4%).

For the traditional students, the K-12 experiences were the most powerful influence after content, while for nontraditional students it was the teacher education program. For this reason, Powell suggests that reconstruction of former teaching role models would be helpful to the traditional students. But for the nontraditional students, it may be more helpful to have them critically examine the connection between their former

roles and careers and becoming a teacher. The data for the present study also indicated a greater number of references to teacher education influences than to K-12 experiences.

Influences from the data of the present study upon the perspectives (mental model, schema, mind view, world view) of nontraditionally aged individuals who are seeking to become teachers are shown in Figure 3. First, at the top of Figure 3 is the early history or birth family background called, in this figure, the 'formative biography'. It includes influences from family, culture, church, and society, as well as historical and psychological context. To the left are 'professional values and beliefs' related to employment. On the right are 'personal values and beliefs' related to parenting and other activities such as leading youth groups, travel, reading, and coaching. Then finally, at the bottom is the most current influence, the teacher education program which includes university courses and field experience.

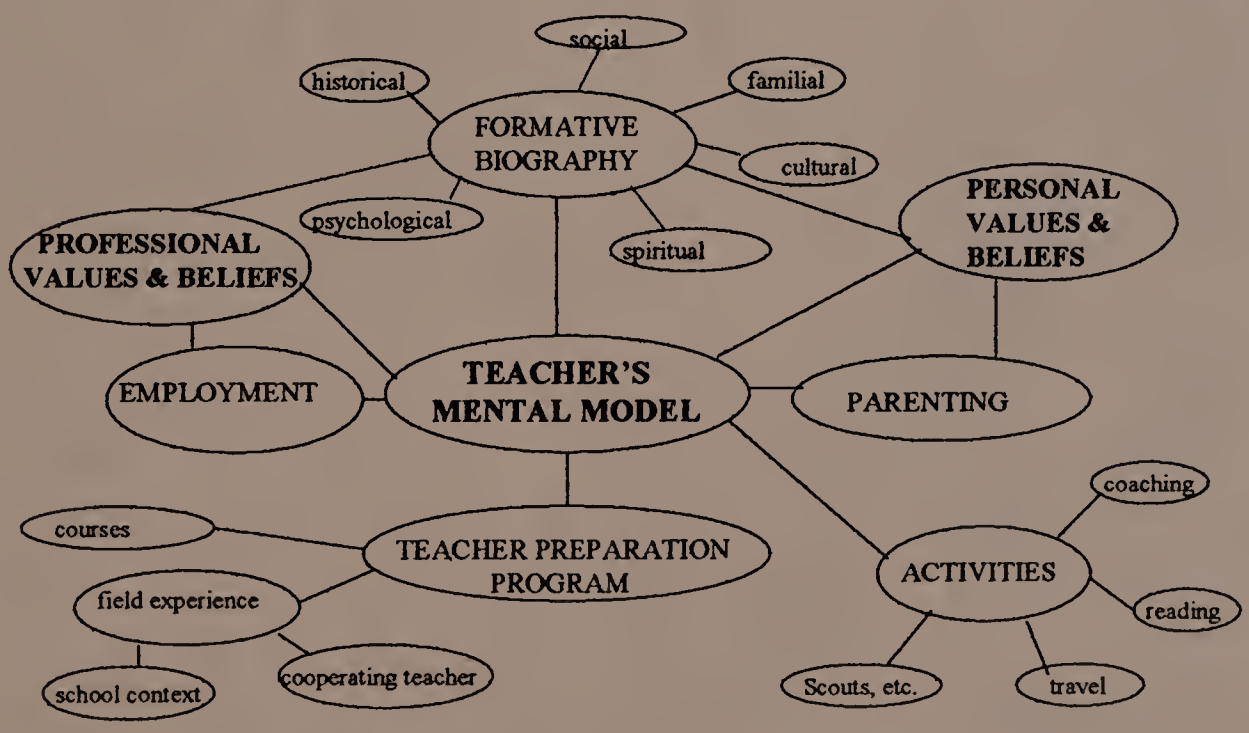


Figure 3: Influences on the mental model of a teacher

Teacher Role Identity (TRI)

Teacher role identity (TRI) is the way in which individuals think about themselves as teachers (Crow, 1987). The data suggests that past life experiences, particularly parenting and jobs and other activities in which participants have taught or worked with people while being in authoritative positions, influence the formation of teacher role identity. Suzanne talked about how teaching her own children made her realize that she had a knack for it. Her mother was a teacher. David, whose father was a life-long educator, remembers talk at home centering around teaching and learning. These preservice teachers, through their life experiences and positive family role models, have strong teacher role identities.

Knowles referred to Munro's (1987) case study of four pre-service teachers in which biography influences classroom practice in some of the following ways: "confidence displayed in the classroom; relationship with students; and personal work habits, planning and organizational skills" (Knowles in Goodson, 1992, p. 105). The teacher role identity was found to be strongly related to biography (Crow, 1987), particularly to role models (positive and negative), to remembered childhood experiences about school, and to family activities and role models (Knowles in Goodson, 1992). Although this prior knowledge of teaching may be underdeveloped during the pre-service teaching phase, it nevertheless serves as a filter for interpreting new information about teaching that is acquired during teacher preparation (Crow, 1987; Powell, 1992).

A Model to Link TRI and Life Experiences

Knowles, building on Crow's study of teacher role identity (TRI) and socialization, proposed a model that links experiences with beginning teacher and student teacher behaviors. He calls it his Biographical Transformation Model. It is reproduced here. Formative early experiences are interpreted by memory, become part of our life's schema, which become a framework for action for student teachers and beginning teacher. Those actions and resulting experiences and their interpretation feed back into the schema, giving it additional information for action.

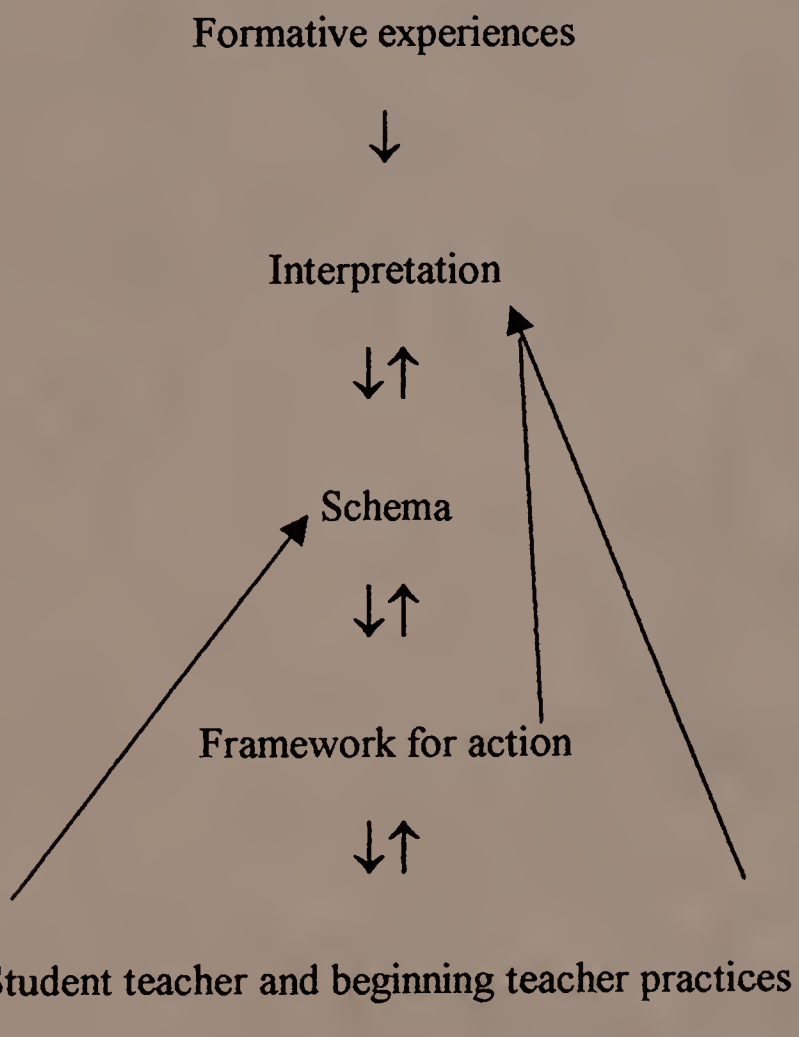


Figure 4: Biographical transformation model

Source: Knowles, J.Gary (1992) *Models for understanding pre-service and beginning teachers' biographies: Illustrations from case studies.* In Ivor Goodson (ed.) Studying Teachers' Lives, p. 137.

Crow's teacher role identity work, upon which Knowle's model was based, was with traditionally aged preservice secondary level teachers. So former careers and parenting were not a significant part of the model. Knowles identifies what is meant by 'formative experiences'. They are "family experiences as a child", "experiences with teachers", and "school experience" (p. 142).

Powell found that, while content learned in school carried the greatest influence upon practice with developing teachers, both traditional and nontraditional-aged, there were other powerful influences at work not recognized by Knowles' model. Looking at Powell's study, teacher education was next in influence, based upon the percentage of mentions in transcripts from his study. Beliefs and values (24.6%), prior work (21%), learning style (13%), parenting (12.4%). The following discussion, following Powell's order of influence, concerns the influence of values and transformation, prior in-school experiences, jobs, other activities, learning style, and parenting as it relates to this study. Finally there is a proposal to modify Knowles' Biological Transformation Model in the section entitled "A Modified Biological Transformation Model". This modification incorporates Powell's influences. A chapter summary concludes the chapter.

Values

Personal values and classroom values also influence the classroom behavior and the guiding images of teachers. Participants were asked to rank the importance of a list of values with '1' being the highest ranking or top priority. The results were generally consistent with classroom observations and interviews. In Powell's study, cited above, beliefs and values came in third mentioned in nearly 25% of references from participants.

Interestingly, in his comparative group of traditional students, this category captured less than 5% of references in the transcripts.

In this study participants identified top classroom values as "understanding of children and their needs", "communication", and "fairness and equity and justice'. These values were also the very ones that they identified as having learned from parenting and activities involving children. Diane, for example, commented, "I think you're shortchanging a lot of children if you don't try to find out what their strengths are and if you don't let them show that to their peers."

Powell (1992) in his study of traditional and nontraditional preservice teachers found that personal beliefs and value systems were particularly salient for the nontraditional students who were mothers entering teaching and for those who had strong religious convictions. Those two categories fit the participants of the present study; four participants are mothers with children at home and the fifth participant, a male, has strong religious convictions.

Transformative Life Experiences

Mezirow (1991), like Dewey, sees learning as transformation of the meaning we make out of our experiences. Zemke & Zemke (1995) found that the more life-changing an event is, the more likely it is to be associated with learning opportunities. Participants all mentioned the birth of their children as transformative events. They also thought of going back to school and preparing to become a teacher as transforming. Two people mentioned the historical event of 9/11/01, the date of the terrorist attacks on the World Trade Center in New York City. Other transforming events were a significant birthday

(40th), marriage, going to college, a year in another country and culture, death of grandparents, seeing parents age, seeing a therapist, and an extensive biking trip in a western state. Each person felt motivated to go back to school because of some transformation (Zemke & Zemke, 1995); the act of learning (Mezirow, 1991) was transformative in itself. The experiences above were mentioned, by participants of the present study, as influential in forming their mental models of the world. According to these theoretical perspectives, transitions and transformations, more than chronological age, provide the framework for understanding and evaluating human behavior. Thus, it is less important to know a person's age than to know whether he is making a career change, caring for an aging parent, or newly married.

It follows, too, that unresolved, negative, deeply felt hurts such as a divorce or death of a close family member could affect the teacher in ways that would negatively impact the classroom and teaching. Once resolved, however, these experiences can be helpful in communicating with those in similar situations.

Images and Experiences from School Days

Teachers do not come into this profession ignorant of the workplace they are entering. They have spent countless hours in classrooms as students. Thus they have had 16+ years of an "apprenticeship of observation" (Lortie, 1975) in which to internalize what teaching is all about, both positive and negative images.

An underlying assumption in this research is that the teacher is the major player in the classroom (Butt et al., 1988), making decisions that influence curriculum content pedagogy, and change. The teacher possesses knowledge built upon life's experiences,

personal, practical, and professional. The student teacher enters the practicum experience with ideas about teachers from past experiences.

In interviews from the present study, participants describe favorite teachers by using words like "enthusiastic", "happy and smiling", "inspiring", "passionate", "energetic", "sense of humor", "creative", "enjoys the children", "excited to be there", and "listens to children". They also favored teachers who involved them in meaningful projects that promoted learning. One participant claimed that teachers are huge role models for children and another expressed the affirmation that teachers are the number one resource in schools.

Likewise, participants have described teachers that they would <u>not</u> want to emulate, those who give them images of what they do not want to be. These are described with words like "burned out", "just there to pick up a paycheck", "boring", "no sense of humor", "no heart", "unfeeling", "punitive", "bland".

As found in earlier research (Weinstein, 1989) and supported by this study, both 'good' and 'bad' teachers were described more often in affective terms rather than a subjective analysis of their teaching techniques which may represent a discrepancy with policy makers who measure good teachers in terms of student achievement. However they are perceived, these 'good' and 'bad' teacher images can be a powerful influence on the developing teacher. (Bullough & Gitlin, 2001; Holt-Reynolds, 1992; Knowles, 1988; Powell, 1992).

The Influence of Learning Styles

Powell (1992) observed that "preservice teachers' strategies for planning and teaching were influenced by their own learning styles" (p. 232). Diane, in an interview in which we were talking about school, reflected about her favorite year in school in which she was in an open classroom in second grade. She loved the unstructured environment of project learning. She remembers spending a lot of time socializing and reading. Her comments about her pre-service teaching reflect this love of projects and collaborative interaction and reading: "My favorite classes were ones with smaller groups and students talking, not just being talked to. I particularly like a class where we interact a lot with other students. I do like a collaborative class." In her pre-service teaching she was happiest with cooperative learning groups and doing projects. Her love of books and literature, continues today and influences her practice. She says, "Literature is a good way to introduce anything." Ann commented "I always try to present everything in a prepared, organized way because that's how I learn best." One could easily imagine that these two women would have very different classrooms at this point in their lives, based upon the influence of their own learning styles and preferences.

Images and Experiences from Work, Jobs, Career

It is apparent in this research, as in the literature (Crow, Levine & Nager,1990; Hutchinson & Buschner, 1996; Novak & Knowles, 1992; Schoonmaker, 2002), that each participant has a valuable reservoir of work experiences that they use in learning to become a teacher. David and Suzanne, for example, were both consultants in marketing and sales. They frequently made presentations in front of groups of clients and other

people. In their lessons, they presented themselves with confidence and appeared outwardly calm. One can easily imagine that this is a carry-over from their previous employment.

A summary of participant's responses about which previously learned job skills are useful to them in learning to teach follows in Table 7. This list was not constructed by the researcher in advance as the 'values' lists were. All of this data was gleaned from the interviews, portfolios, & journals.

Interpersonal skills and oral and written communication top the list of skills that participants cited as having carryover in the classroom, followed by organization, empathy, and working with deadlines. In the interviews, each of the five participants identified (summarized in Table 7) "interpersonal skills" as a job-learned skill that they feel will serve them well in learning to teach. In a school context, interpersonal skills relates to working with children, other teachers and supportive staff, administration, and parents. "Oral and written communication" were mentioned nearly as frequently. These are the very qualities that topped the list of classroom values (Appendix I), as prioritized by these same participants.

Other values near the top of the 'values' list were skills that participants felt were enhanced by the experience of being a parent. Those were empathy or "understanding of children and their needs" and also "fairness and equity and justice".

Table 7: Previously learned job skills that serve well in learning to teach

Skill	Ann	Dave	Diane	Kathy	Suzanne
Interpersonal skills	x	x	x	x	x
Oral communication		x	x	x	x
Written communication	x	x	x		x
Organization	x	x			x
Empathy for roles of others		x	x	x	
Computer usage		x			x
Analytical problem solving		x		x	
Time management		x	x		
Managerial experience		x			x
Knowledge of other's need of positive reinforcement			x	x	
Working with deadlines		x	x		x
Patience				x	
Running meetings		x			
Sharing responsibilities		x			
Preparing for the unexpected		x			
Being part of a team			x	x	
Multi-tasking					x
Prioritizing	x				
Coping with loosely defined work that 'never ends'	x				
Responsibility	x				x
Hard work	x				
Working with rules & regs.	x				
Mentoring	x				
Flexibility			x		
Listening		x	x		

Source: Interview transcripts

Images and Experiences from Other Activities

We know that aside from their professional preparation, teaching candidates learn applicable skills from coaching, scouting and other activities (Bransford et al. 2000; Powell, 1992). Aside from being parents these participants were involved in many other activities with children such as youth sports coaching, children's theater, church youth

leader (David), leading a scout troop and hiking and camping (Diane), ski coaching eight to ten year-olds (Suzanne). According to the participants these activities have increased their understanding of children and especially of their behavior in group-settings outside of the family. From these activities participants expressed gaining greater understanding of children's development of the ages with whom they worked, greater empathy, and greater communication skills with a variety of personalities of children. These activities also provided opportunities to be in front of groups presenting information.

Each participant was asked to think of a metaphor for teaching or learning. No one could think of one right away so they were asked to think about it. Only David came up with a metaphor. At first, he said that the obvious one would be coach, which is used frequently a "favorite of Google (Internet search engine)" he said, but he rejected that one, presumably because of his life experience. He has been a youth sports coach and he didn't think that metaphor fit. He felt it "wasn't doing enough service to the teaching profession" and that "it didn't expand enough…". Finally, he likened teaching to being a tour guide. He said, "The guide brings people to interesting places, describes the places for them, makes it interesting, and helps build their knowledge to do with what they will. And a good tour guide needs to understand the tourists and what their interests and capabilities are."

In his journal he used another metaphor after a particularly trying morning at home with a sick child. He felt that his mood should not interfere with the learning that needs to take place in the classroom and so he wrote, "Mood is not something to react to, rather it needs to be an explicit part of the lesson in a planned and controlled way, not unlike how a Broadway actor must have to deal with his/her emotions day after day. The

emotions that get displayed to the audience (and in this case the students) must be planned, scripted and controlled." Another interest and activity of David's is theater.

Participants described other activities such as community and volunteer activities as providing valuable experience as well. Meetings honed the skills of listening, talking, compromising, and sharing, important skills for working with colleagues, administrators, and parents.

David summed up his feelings about his various activities (youth sports coach, Sunday School teacher, drama coach) this way "....they've [activities with children] influenced me to the degree that the kids in the classroom are getting ME with all of that...because I've been very child-focused over the last seventeen years, maybe that will help a lot..."

Images and Experiences from Parenting

Powell & Birrell (1992) found that many of the nontraditionally aged preservice teachers in their study were parents who framed their conceptions of teaching around their experiences with their own children. In the present study, not only did their own and other people's children inform their practice, but their parenting experiences were the primary reason they elected to teach children. They expressed awareness of the differences between working with your own children is different from working with children in a classroom. It required modifications but gave them increased ability to communicate with children (and their parents), awareness of when to push and when not to, ability to anticipate children's behavior and reactions, what works to get desired results and what doesn't.

Participants were generally positive about the influence of parenting upon their learning to teach. They did not mention the stress that is created by the dual role of teacher and caregiver. Claesson and Brice (1989) interviewed teachers who taught in the primary grades and were also mothers of young children. At first the informants believed, as did the participants of the present research, that the roles complemented each other and that the role interactions were mainly beneficial. However, after the interviews ten specific problem areas were listed, affecting their role as mother rather than that of teacher.

In journal entries and interviews these participants did mention the stress created by a sick child at home or by the stress they experienced when they felt guilty about not having enough energy to work with their own children in the evenings. It seems reasonable that these experiences help them to empathize more with the working parents of the children they teach.

Suzanne's cooperating teacher volunteered this comment about Suzanne:

> I really enjoyed it [having Suzanne as a student teacher in her classroom] because she is a mother. She has a child the same age as these children so she has that experience. She can talk to other parents. So that part of teaching is all taken care of. It's really wonderful.

What makes understanding different for those who know about, say parenting, and those who do not, is the connected internalized understanding. The number of different connections that each has with the basic concept, for example, of predicting children's behavior in certain situations. Connections in the brain can only be made if the ideas to be connected exist. This idea of brain connections can be visualized much like a graphic of a molecule with each little ball (idea) being connected to others. In educational parlance, each idea could be considered a 'hook' for learning. Each idea

provides another ball for the next idea to hook onto. These connected ideas form an internal knowledge of children that is learned in being a parent and in working with children.

A Modified Biographical Transformation Model

Knowles' Biographical Transformation Model was introduced previously in Figure 4. This model was based upon the work of Crow (1987) with teacher role identity and built upon by Knowles. Crows' participants were all traditionally aged students who had gone straight through school and not yet entered the work world fulltime nor become parents. So those experiences have not yet entered their world view or internalized 'schema' of the world. Knowles uses the word 'schema' in his model with a caveat. He says, "the terminology used in explaining the model, while similar to that used in schema theory, ought not be confused with it" (p. 136-137). He explains that what he calls the formative experiences (from family and school) are first interpreted by the individual, "The experiences have both immediate inherent [at time of the event] and reflective assigned meanings [understanding of the event at a later date]" (p. 137). The reflected meaning is a result of standing back and analyzing. This is what Knowles calls the "interpretation" which leads to the schema. The schema "determines the way in which future encounters with teachers or learning environments are interpreted and acted upon" (p. 138). The schema is a way of understanding that is "highly idiosyncratic"; "individuals experiencing a singular event have multiple perspectives of the event because there are different interpretive slants that can be assigned" (p. 138). So through the interpretation and schema, role models are accepted or rejected. The schema then

becomes a framework for action. Knowles further reflects, "The realities of the classroom and context modify the framework for action but, invariably, the biography of the individual is played out in their 'teacher practices'.

The modification that I would like to make to Knowles' model is to refer to the first step, not as "formative experiences" but as "life experiences" because then the model better fits nontraditional students as well as traditionally aged students. Within that top category of life experiences, in addition to birth family and schooling, would be marriage, jobs, parenting, and other life experiences, all of which provide a filter (Feiman-Nemser, 2001), influence the schema (Knowles, 1992), and provide brain connections for internalized understanding.

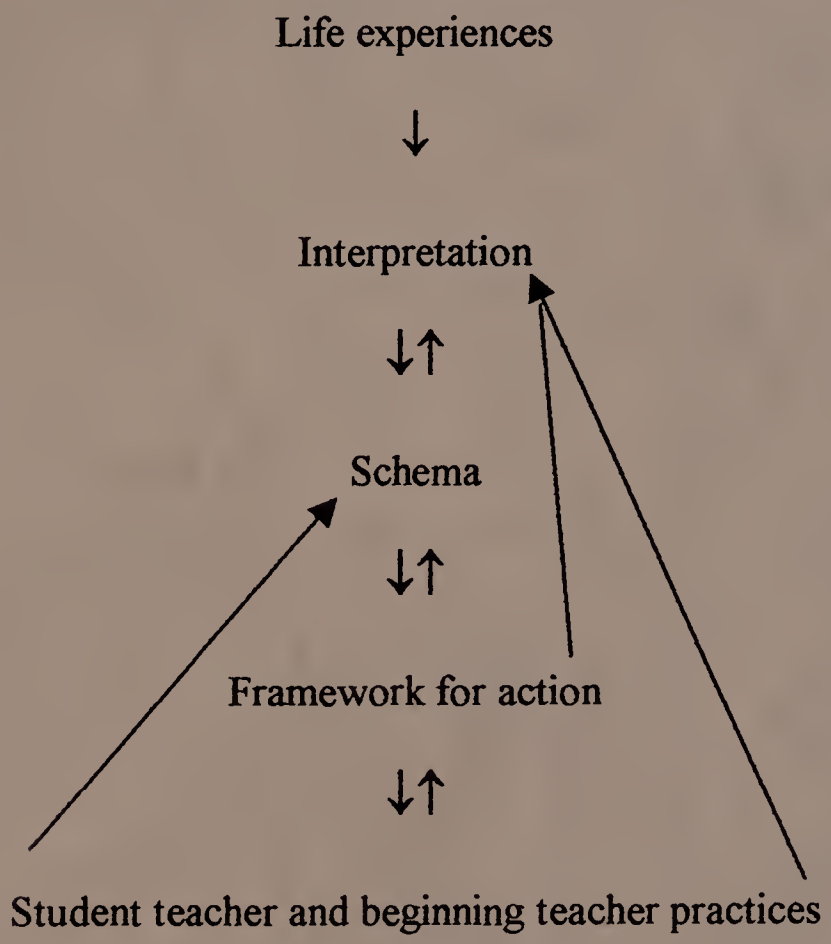


Figure 5: Modified biographical transformation model

In regard to the influence of teacher education programs in role identity, Knowles and Powell disagree. Powell says that teacher education is a "primary influence" for both groups, "both traditional and nontraditional participants in the present study were influenced by the information they received in their teacher education courses and early field experiences..." (Powell, 1992, p. 235). Knowles, however, says that "Apart from the experience of Kristen [22 years old, youngest in sample] the other individuals [aged 26-39] were not influenced greatly by their participation in formal teacher education" (Knowles, 1992, p. 126). Knowles', as evidence, cited the case of Dwayne who could recite educational theories and intellectualize about ways to act in the classroom, but then he fell back on strategies that he had long felt comfortable with even though he agreed they were not good pedagogy.

Knowles found that the influence of teacher education programs was surpassed by the influences of life experiences. He posits that the difference may lie in the difference between intellectual learning and experiential learning.

In this study, there was evidence that the preservice teachers were struggling with their own role identities in the classroom. They were comparing themselves to their cooperating teachers. Diane said this:

> I definitely felt like I was taking some of what she [cooperating teacher] was doing and trying to think what I would do but it wasn't quite there yet. Even at the end. So I definitely felt like I was practicing a lot because I don't do well just following what someone else does.

David expressed struggling with his role identity too. He said:

> Overall I guess I want to match her [cooperating teacher] style 80% of the way but there's a 20% factor that I'm thinking there's something else. If I totally

emulate her then I won't be bringing in myself. So I haven't quite figured out what it is exactly, other than I think it's a little bit more freedom for the students, a little bit more choice for the students, and I don't know who can answer the questions of how can I do that better…

Summary

So, how does prior knowledge influence learning to teach? Life experiences influence teaching in these ways:

(1) direct application of learned skills such as organization and management

(2) indirect application of a filter (lens, worldview) through which every thought is passed

(3) a new schema for teaching with connections to other ideas which lead to internalization and a framework for action.

In the eagerness to equip student teachers with the content and skills necessary to teach it is easy to lose sight of the fact that each student teacher is a person who influences what happens in the classroom. Teachers are often left with "little professional support for nourishing their own sense of being as knowing, thinking, acting, feeling, and striving individuals" (Schoonmaker, 2002, p. 43). Learning to teach is perhaps primarily learning about self, about making sense of one's own successes and failures in personally and professionally meaningful ways. This requires a reconstruction of the memories of ones life experiences (Schoonmaker, 2002). Dewey talks about reflection as a form of thorough inquiry (Dewey, 1933) that "asks questions of the experience in order to better understand it. By examining the past experience in a considered and focused way, one could learn and grow" (Schubert & Ayers, 1992).

The teaching preparation program will be more effective if it can successfully integrate the past lives of students into their emerging lives as teachers, to reflect upon all of it, and re-examine it in the light of the theoretical basis for teaching and learning in teacher preparation programs and the practical knowledge that they are gaining in classrooms.

CHAPTER 6

SUMMARY AND CONCLUSIONS: IMPLICATIONS FOR PRACTICE AND FURTHER RESEARCH

Mature students, however, do not just bring their experience with them; they are their experience. Rosalind Edwards

Introduction

At the inception of this research, age was seen as the defining characteristic of these mature aged students, making it seem reasonable to situate the research broadly within the domain of adult development. The collection and analysis of the data led the research in other directions as well. One of those directions is what teachers are thinking as they teach, which is loosely related to age. It is more accurately related to life experiences, which are usually greater with age, and impact what the teacher perceives and subsequently the decisions and actions.

The main research question in this research is "How do the life and job experiences of mature age students influence their learning to teach children in an elementary classroom?" The easy and superficial answer to the research question is 'in many ways'. Parenting provides experiences with children and what is learned is often utilized in the classroom. Experience at other jobs helps in relating to others, to organization of materials, and time management. Other life experiences such as travel, reading, and leisure activities also influence learning to teach.

But how does this increased experience help the developing teacher? The how was found in the details of the data of each individual. Their life experiences influence

their identity, their thoughts, their actions, their decision-making, their guiding images, their mental model of the world. The experiences or images and beliefs of life provide the lens through which new experiences are interpreted. Life experiences, if processed and reflected upon, transform our understandings and consequently our perspectives, approach, and our evaluation of the next experience.

From these experiences we develop constructs or images that guide actions. David, for example, said that he wants "to present to the students, not jut the information, but...to be able to solve problems in issues and discuss them". Another construct was "It is smart to anticipate and prevent misconceptions." Diane, the editor, said this about the first graders she was working with, "For these little young writers who have a hard time putting together four sentences, the more you can kind of praise them the more you're going to encourage the really primitive beginning writing. That's what you want. You want their thought. The whole idea of the red pencil...they even know that at a young age." Ann expressed her feeling that "The better you know children the better you are at managing them." One of Suzanne's guiding images is "On Friday afternoons the children need an activity that is fun."

Sometimes the images can be a barrier or are an indication of an idea that has not been carefully examined. An example of a construct that would lend itself to further examination or reconstruction is Ann's statement that 'School should be work, not play." What does she mean by this? Would she apply this to early childhood as well as older children? What does she mean by work? Is play seen as something that is frivolous and

not beneficial? Or is this a mantra that she has heard somewhere and not really examined for meaning?

Teaching is an ever-changing manifestation of your ever-changing self. Life experiences provoke the individual into selecting particular kinds of actions, which in turn lead them in particular directions and which influence the development of teacher identity.

Integration of Findings

When mature people turn to teaching they bring with them all of the life experiences, job experiences, parenting experiences, knowledge accumulation, increased understanding of how the world works, political and social acumen, inter-relationships with all kinds of people, and many other social, psychological, emotional, and intellectual understandings. These experiences provide useful perspectives on students, teaching, and schools. They influence organizational and management structures in the classrooms, expectations and beliefs about children, ways in which curriculum is designed and problems are resolved.

Along with that they also bring a certain amount of "baggage" or negative influences and sometimes unrealistic expectations about the complexities of day-do-day teaching and the realities of the classroom. They may have rigid perspectives about schools resulting in outdated and inappropriate pedagogy, which may assist in the maintenance of the status quo in schools. These influences can be brought to the surface

in university classes or assignments and reconstructed rather than suppressed and viewed as an obstacle to learning. The career changers can thus meld their previous career experiences with the formal preparation period provided by the university in traditional teacher education programs.

How do these life experiences affect learning to teach? There is no doubt that they do. The participants were eloquent in telling how jobs and parenting and other life experiences influence their view of the world and their teaching. Yet it is understood that life experiences become such an intrinsic part of people's lives that they become embedded in their teaching. This is difficult to access in three interviews, even supplemented by observations and many documents. In retrospect, perhaps an ongoing journal would be helpful in which participants are asked to jot down (or speak into a small recorder) each time they think of something that relates to a past experience. However, the time requirement of practice teaching, as it is, strains even the most organized students. Life experiences are embedded in the perspective or mental model of the person learning to teach. They may not even be aware of this or of the relevance to their professional development. Life experiences influence the lenses through which they view teaching and learning and children.

It can be said that some of the valued personal characteristics such as responsibility, organization, and flexibility normally become better developed with age and with the experience of previous jobs and being a parent. More importantly the teacher brings to the classroom enrichment from life and job experiences that can be

found in no other way. These experiences help to shape the guiding images for choices made in the classroom. They influence every aspect of who the teacher is, the professional self-identity, the personal and professional values, and what decisions will guide the teacher and what decisions will guide each teaching moment.

Confucius was not necessarily thinking about teachers when he said this but it could be applied:

> By three methods we may learn wisdom: First, by reflection, which is noblest; second, by imitation, which is easiest; and third, by experience, which is bitterest.
> *Confucius, Chinese philosopher 551-479 B.C.*

A secondary question, now addressed, was "How can teacher educators better utilize an individual's life experience to enrich teacher education for all students?"

Implications for Educational Practice

Participants had their own ideas about what they felt needed to be changed in their preparation. Sometimes they came right out with it and other times their ideas had to be inferred.

Consistent knowledgeable advising

One area that all participants mentioned was the need for good advisory information throughout their program, whether it be graduate or undergraduate. Most institutions of higher learning do a better job advising the traditional full time college students than the non-traditional students, many of whom are part-time. They would like

to be assigned to one knowledgeable person who would assist them throughout their coursework and to whom they could turn when they have questions.

More opportunities for dialogue among students

The other thing that arose from this research is the need to have more dialogue among all of the students. This would provide an opportunity for older more mature students to share their experience and feel more valued themselves. They frequently feel alone and unappreciated. Yet they are novices to teaching and need to feel part of a community of learners. They want to talk about their experiences in the classroom but too often the regularly scheduled college seminars that usually accompany field experience are pre-programmed rather than allowing students to talk about what they are most concerned about at each stage of their developing knowledge about the realities of teaching.

This research concludes, as did that of Bullough & Gitlin (2001), Knowles (1992), Powell (1992), and Schoonmaker (2002), that curriculum should acknowledge and account for the pre-service teacher's personal practical experience and knowledge. As Powell observed, life experience knowledge illustrates, vitalizes, and tests the theoretical principles of teaching that are included in most teacher education programs.

If, indeed, the teacher is the most influential part of an individual's education and learning, then it is worth thinking about how life experiences might be further enhanced

for traditionally aged students through their coursework, reading, and field experiences. Mature aged students, in classes with traditional students, can assist, and enrich the classroom experience if their contributions are respected and facilitated by dialogue.

If one accepts Dewey's premise that education is the continuous reconstruction of experience, then it follows that that experience must be examined in order to reconstruct it and make it meaningful. Dialogue, facilitated by the university professor, to reconstruct experience, to "turning it around slowly in the light" and examining it as Virginia Woolf said, is a way to help each person develop their professional identity as teachers in personally meaningful ways.

Careful choosing of cooperating teachers and other mentors

Attention should be paid to the ability of cooperating teachers to mentor new teachers. Cooperating teachers need to be willing to give over their classroom to the student teachers. They need to know how to talk with mature-aged students without being threatened by their age and experience. Mentoring mature-aged adults could be problematic if the mentor is younger than the new teacher.

Being knowledgeable about adult development and adult learning would help those teacher educators who work with older adults to be more effective in working with adults who have rich life experiences. It would be helpful too if they had biographical information about the student teacher such as a resume and perhaps an educational biography or history written for a college class.

Support needs

Are the instructional needs of these mature students the same as for younger students? For those without prior teaching experience, they are still novices at how to present lessons in classrooms and how to structure classrooms for optimal management. So these needs are certainly similar. Other needs are different however. These students do not have the network of support that is more readily available to four-year college students. Yet they will have many of the same questions and insecurities. It would be helpful if education programs would help to facilitate support groups. Consideration could be given to grouping these students for projects or putting them in a field placement with other student teachers. Pairing with a traditionally aged student for peer coaching is another way to build support for both students (Gilman, David A., 1988; McAllister & Neubert, 1995). Seminars with open dialogue help to provide support as well.

Writing educational biographies

The Latin root for education is 'educere'. In contrast to training, "this emphasizes the use of methods that lead or draw out" (Bullough & Gitlin, 2001) or 'educe'. Parker Palmer (p. 83) refers to this root word as "drawing out the learners' truth." Only then does he believe that new teaching techniques and institutional change will "find sure grounding". In order to transform students into teachers, teacher educators need to know, and be able to draw out, the life histories of these students of teaching.

Knowles (1988), whose research on the impact of early history upon teacher

development, recommends the following:

> University preservice training is usually too short, too structured, and insensitive to individual needs and backgrounds to do anything but provide a thin overlay experience; one that usually creates further discontinuities in the thinking about the teaching profession. By not accommodating and dealing with the autobiography of teachers in training, future beginning teachers are bound to become teachers who taught as they were taught; individuals whose professional growth may even be stunted.

Writing "educational biographies help adults discover their needs through interpreting their life experiences, instead of assuming that the requirements of an educational program are the same as their needs." (Dominice, 2000, p. 81) This biographical approach is key in teaching adults and in training adult educators.

It seems to be a hard lesson for educators to learn that the content of learning belongs to the learner. Each has his or her own approach to learning. We cannot teach to each one and everyone at the same time. This need for individualization creates tension with the current trend to systematize everything. Biographical approaches might contribute to once again emphasizing the personal side of learning as well as enlarging the idea of education so it has a more global perspective. Preservice teachers who are encouraged to examine the practice of themselves and others and to reflect upon their previous understandings (reconstruction of past experiences) will make meaning of those experiences.

Teacher educators should "ask teachers to construct 'autobiographical selves' to perceive and evaluate the complex factors that may influence their classroom decisions" (Moje, 1993, p. 11). Educators need to closely examine the context of teacher's lives and

student's lives to make significant changes in education.

This can, however, be a risky business (Schoonmaker, 2001). Some students may not wish to reveal some views or beliefs. Ethically, teacher educators cannot compel students to disclose more about themselves than they wish. They can only invite. This brings to mind the importance of trust and the importance of a non-threatening classroom environment. It is important for teacher educators to be aware and sensitive to this possibility of non-disclosure, but the benefits of using life histories far outweigh the risks.

Each program needs to find the best way that they can meet the needs of these students within the confines and requirements of their own particular programs. The rich experiences and powerful motivation that these mature aged new teachers bring to classrooms make it well worth this extra consideration by those involved with teacher preparation.

Schoonmaker (2002, p. x) theorizes:

> … teacher education has not squared with what teacher education students already know. It is small wonder that university-based teacher education is being seriously questioned and challenged. If university-based teacher preparation is to have a role in the future, the university must come to terms with the key role that personal knowledge plays in learning and recognize that knowledge must be co-constructed if it is to have lasting meaning.

Teacher educators, beginning with biography, can find ways to "identify, clarify, articulate, and criticize the assumptions – the personal theories and their surrounding gestalts – about teaching, learning, students, and education embedded within it. " (Bullough & Gitlin, 2001, p. 9) It is through the examination of prior experience and

prior socialization that student teachers make sense of teaching and understand students and their abilities, decide upon curriculum, and grow and develop as teachers. If teacher education is to be more effective then commonly held assumptions about teaching need to be challenged.

Suggestions for Further Research

Further research is needed in the area of the development of teachers and how their personal lives and experiences intertwine with their teacher preparation to produce effective caring teachers. Reviews of the current literature and results of this research show that mature aged people advance more quickly through the developmental stages of teaching. Are there ways to speed that development for traditionally aged student teachers and would that even be desirable? Developmental theory, including adult learning and teacher development, can serve, not as prescription for practice, but as a useful lens from which to critique teacher preparation

This research supports the opinions of other researchers that there is a need for more longitudinal studies to determine the effectiveness of nontraditional-age teachers and their retention (Eifler & Pothoff, 1998; Manos & Kasambira, 1998; Walker, 1996).

Mature aged students could be paired with the traditional aged students in peer coaching situations (Gilman, 1988; McAllister & Neubert, 1995). Studies of the efficacy of pairing mature aged with traditionally aged college students for peer coaching may precipitate some interesting models (Devlin, 1996; Haipt, 1990).

What are the effects of travel and reading and other leisure activities? The data from this research touched upon this part of the life experiences of many people and it seems to enrich understanding of content as well as classroom dynamics. More understanding in this area could lead to changes in the professional development programs to encourage more reading and travel and more volunteer experiences with children such as those provided by coaching and scouting.

Several of the participants commented that they were more comfortable teaching from lessons that they had prepared than from lessons prepared by textbook publishers. They felt they understood the objectives and the content in a much more satisfying way. It would be interesting to research the difference between traditionally aged and mature aged student teachers or beginning teachers in this regard. Is there a difference between the two groups in whether they prefer already prepared lessons or ones they prepare themselves? Then, do they teach more effectively with prepared lesson plans or with those that they have prepared themselves?

Brown and McIntyre (1993) in *Making Sense of Teaching* provide a guide to understanding the daily lives of teachers. They describe how teachers talk about their work and how researchers can go about asking about that work. Perhaps additional research can shed light upon the beginnings of an enlightened model of teacher professional development, a model that recognizes the importance of life experiences. Schoonmaker (2002, p. 137) goes even further with the suggestion that in addition to cognitive knowledge and skills, attention should be paid to:

> …attend to the development of essential capacities such as *wonder*, which leads

to poetry, art, invention, and recognition of the transcendent in human experience; *reflection*, which leads to synthesis of diverse fields of information, creativity, problem posing and solving, inner peace, thoughtful action, and wisdom; *merriment*, which leads to a balanced perspective on life and to appreciation and critique of ourselves and our world; *friendship*, which enlarges our capacity for justice, responsibility, and caring, defending us from physical, mental, and spiritual loneliness and isolation; and *compassion*, which makes it possible for us to be with others in their pain and approach them as friend rather than enemy.

Summary and Conclusions

Teachers apparently construct their personal thinking and decision-making primarily upon personal knowledge, teacher education knowledge, and practical experience. Universities currently attend to teacher education with theoretical and practical experience. Personal knowledge is, for the most part, ignored. To ignore personal knowledge is like putting on a layer of clothes, the ideas of others, compared to transforming the self with a strong internal working knowledge into someone who, through deep self-understanding, is ready to teach and serve others. This self-knowledge comes from a long, steady dedication to learning and questioning and it is unlikely to be found in just a few courses of university preparation and a semester of classroom experience. Fledging teachers will be disappointed in themselves, and others in them, if they think that a college degree and passing grades on teacher certification tests is all it takes to become a teacher. Schoonmaker (2002) observes, "The fact that personal knowledge seems to trump preparation knowledge suggests that teacher preparation is ineffectual. And it feeds into the public notion that anybody can teach." Teachers are not made in one course or one university's preparation but in a lifetime of learning. It is

a continuing process of reconstructing one's own personal knowledge. That process is different for everyone and that is why teacher education, layered on like clothing does not stick. Staff development days are too often times in which teachers are told about methods or new curricula that are someone else's idea and how to implement them. Academically able teachers want to be involved in the intellectual and creative aspects of planning, not just relegated to the role of implementing someone else's ideas.

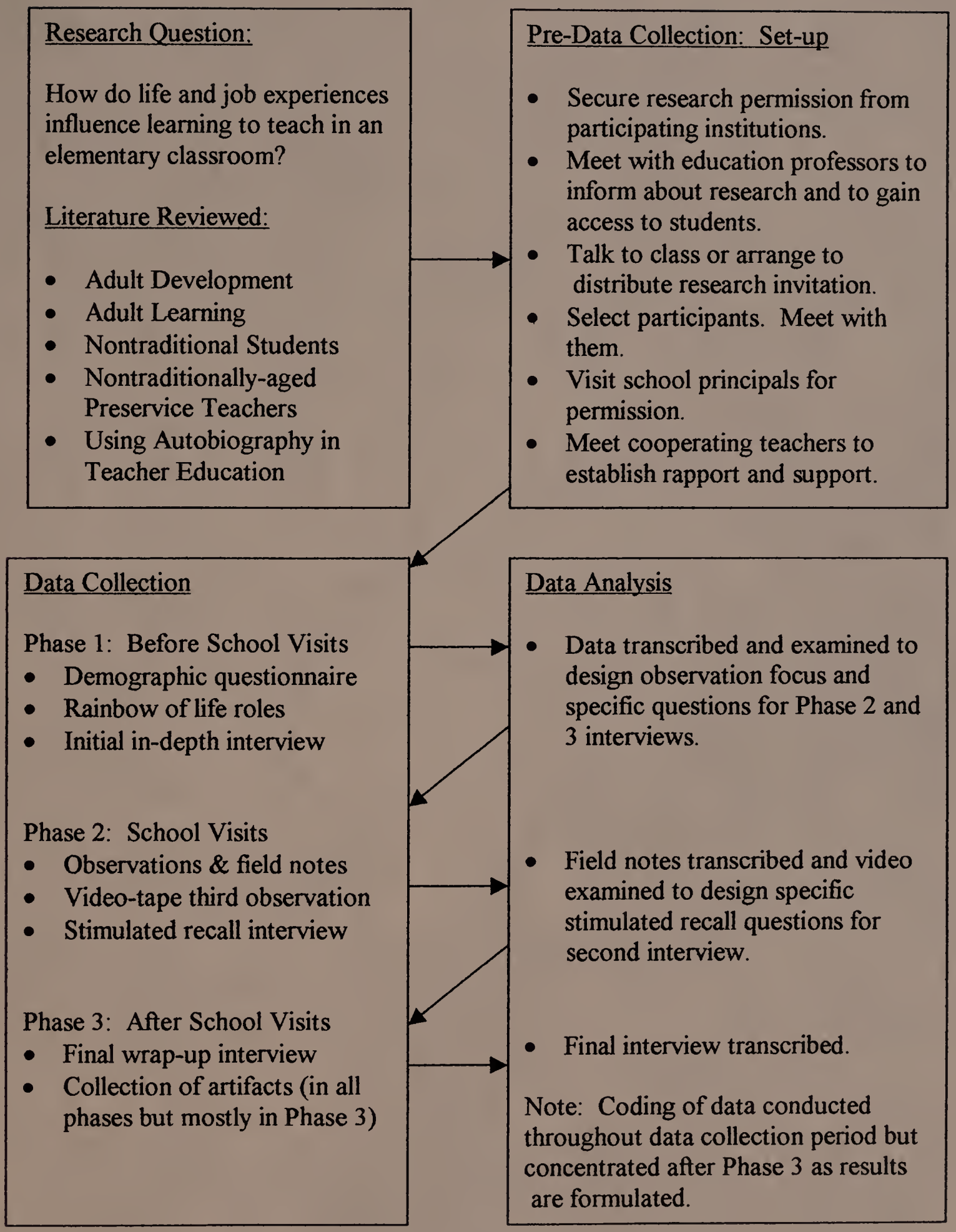
What can teacher educators do? Respect each individual for what they have to offer and for who they are. Provide opportunities for dialogue. Provide support groups to facilitate increased dialogue and reflection. Have students prepare educational biographies and life histories and "critical incidents that significantly influenced" decisions and beliefs about education, and "personal teaching metaphors"(Bullough & Gitlin, pp. 26, 51; Butt & Raymond, 1987; Butt, Raymond, & Yamagishi, 1988; Holt-Reynolds, D., 1992). Challenge them to look back at their own early education experiences and outward to the broader context. The inward look draws upon personal knowledge and brings it to a conscious level so it may be examined and reconstructed. Examine what works and what doesn't work in classrooms. Our own experiences can teach us a great deal about what children need and want. And finally, educators and school administrators can keep asking questions that will cause novices to think about their own assumptions about teaching and learning so that together professor and student may co-construct the knowledge to teach effectively because teaching is a great deal more than dispensing academic knowledge. It requires intentional strategies that will

help to penetrate preconceptions and implicit theories derived from preconceived knowledge and experience.

What teachers do and think derives from the meanings those individuals hold and interpret within the personal, professional, and social realities of their own experiences in life. And what teachers do and think greatly influences every decision and every action in the classroom. The act of teaching is more about who you are than what you know. Who we all are is shaped by a lifetime of influences.

APPENDIX A

RESEARCH FLOW CHART



APPENDIX B

INFORMED CONSENT

The purpose of this study is to explore the influence of life and job experiences of mature age student teachers during their pre-service teaching. The results of this study will be used for my doctoral studies. It could result in a publication. In order to minimize the risk of participant identification, generic names will be used for all participants, the school, and school district. Your name will not be associated with the research findings in any way, and your identity will be known only to the researcher.

Your participation is entirely voluntary and you are free to decide not to participate or to withdraw at any time without affecting your reputation or status at Salem State College. In addition, you have the right to review any of the material to be used in the study.

Data will be collected through three interviews, each lasting approximately one hour. The investigator will also observe the student teachers at work in their classrooms and film them, and only them, twice. Teachers selected for this study will be asked to keep a reflective journal.

This investigation is being conducted by a trained doctoral student under the direction of faculty members at the University of Massachusetts. Do not hesitate to ask questions about the study either before participating or any time during the study. You may direct your questions to me at 781-599-5368 or by e-mail (kklause@hotmail.com), or contact the Institutional Review Board (IRB) at Salem State College, Salem, MA 01970 or call 978-542-6246.

Aside from the time commitment entailed by the interviews and written journals maintained by the informants, this study entails no risk or discomfort to any informants. The expected benefits associated with your participation in this project are a deeper understanding of your experiences as a pre-service teacher and articulation with a committed educator. Time to reflect is rare for educators, so this should be an important benefit. You will also be compensated $50.00 at the end of your participation.

Please sign this form with full knowledge of the study's nature, purpose and procedures. Your signature indicates that you have read and understand the information provided above, that you willingly agree to participate, but that you may withdraw your consent at any time. You will be given a copy of this form to keep. Kay Klausewitz, Investigator

Participant's Signature _____ Date _____
Investigator's Signature _____ Date_____

APPENDIX C

INITIAL QUESTIONNAIRE

Note: All information is for research use only & will be kept confidential.

Name _____

Local Address_____

_____

_____

Home Phone:_____

Cell Phone:_____

When is the best time to call you?

Circle best days: M T W TH F St Su

Best time(s): _____

Time(s) to avoid calling:_____

Who else might answer the phone besides you?_____

E-mail: _____

How frequently do you check your e-mail?_____

Birthdate: _____

Number of children (& their ages): _____

Are you employed now? _____ Number of hours/week that you work:_____

Present & previous occupations:_____
_____
_____
_____
_____

APPENDIX D

DEMOGRAPHIC QUESTIONNAIRE

Note: All information is for research use only & will be kept confidential.

Your name: _____

Date of birth:_____Place of birth:_____

How many siblings do you have?_____ Your birth order? _____

Marital Status: _____

Children's names & ages _____

Who is currently living in your household?_____
_____

How many semesters have you completed at Salem State (not including current semester)? _____

What is your university status? ___senior ___post B.A. ___other (specify)
Major field(s) _____

Degrees beyond high school & institutional affiliation & major field:
_____

Employment (with each job, please indicate F (full-time) or P (part-time)

Present employment & position: _____
_____
About how many hours a week do you work? _____

Past employment & position(s):_____
_____
_____

Student teaching assignment:
School _____ Phone _____Grade Level: _
Teacher _____ Principal_____

Do you have any teaching experience, or experience leading groups of children?
If yes, please describe it._____
_____
_____

Other interests besides teaching?_____
_____

List all schools, colleges or universities that you attended in chronological order starting from preschool and elementary school.

School _____ Town _____ Time of Attendance

_____
_____
_____
_____
_____
_____
_____
_____

Mother's educational level? _____ Occupation?_____
Father's educational level? _____ Occupation?_____

Do you consider teaching a temporary or life-long occupation for you?
Temporary ___ Life-long____ Still don't know____

What are your ultimate career goals?_____
_____
_____

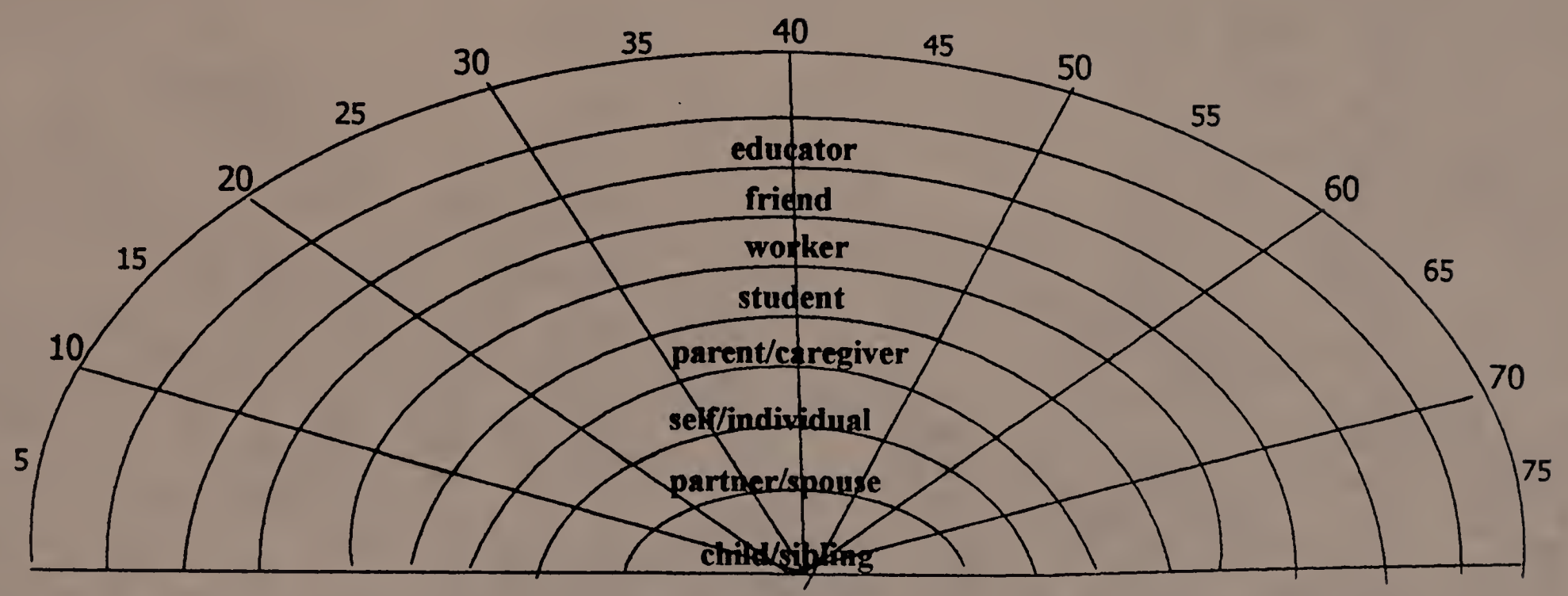
What are the courses you are taking this semester?_____
_____

Which education courses have you taken?_____
_____
_____
_____
_____
_____
_____

APPENDIX E

RAINBOW OF LIFE ROLES

Directions: Use a different colored pencil to shade in each section of the rainbow with varying intensity, depending on the importance or dominance of each role you have played during your life as the years passed. The blank arcs are for you to add any roles that are or have been important in your life. For example, you could include athlete, homemaker, volunteer, wanderer, spiritual, military, etc. One purpose of this exercise is to underscore the continuous and discontinuous nature of some work or life roles and the way life at any point in time is a function of adjacent and simultaneous role expectations. Another purpose is to help you reflect back on your career and how it intertwines with the rest of your life at various stages, however you define those. [adapted from Super, 1990].



APPENDIX F

INTERVIEW QUESTIONS

These questions served as suggestions to help guide each interview. However, the interviews were semi-structured and the interviewer encouraged the participant to talk freely and only used these questions as probes, as needed. Additional questions came from analysis of previous data.

Interview 1: (focus on life history & past experiences & influences)

FAMILIES

- Paint me a picture with words of your family of origin. Make me feel like I am there with you.
- Now do the same thing for your immediate family.

DECISION TO TEACH

- Who in your family is most supportive of your wanting to become a teacher? How does this fit into your decision to become a teacher?
- What (or who) are the most significant influences on your teaching or learning to teach?
- Tell about the moment in time that you can remember deciding to become a teacher?

YOU AS A STUDENT

- When, as a student, did you feel most happy in the classroom?
- What is it like to return to school as an adult?
- Give me a metaphor for teaching & learning. What is it most like to you?

YOU AS A TEACHER

- Do you sometimes feel that if you were younger 'becoming a teacher' would be easier? Why?
- What is the source of your energy in teaching?

YOU AS A WORKER

- Tell me about your past jobs.
- What skills gained in those jobs will be useful in the classroom?
- YOU (Refer to Rainbow of Life Roles)
- Have you had any transformational experiences in your life?

Interview 2: focus on present and stimulated recall of videotaped lessons

FROM PREVIOUS INTERVIEW

- Pseudonym for yourself
- Metaphor for teaching & learning, or how teaching is like other activities

Enter here individualized questions from previous interview or classroom observations:

VIEW VIDEOTAPE (They have already viewed it at home & were asked to view segments with & without sound & jot down words that came to mind.)

- What words came to mind as you watched the video?
- What did you think as you watched yourself teach?
- What are some general challenges that you want to work on that you are reminded of as you watch the video?
- What is better than you expected?

STUDENT TEACHING

- How did you find student teaching? Is it more difficult than you imagined and why?
- How would you describe your relationship with your cooperating teacher? How has this changed over time?
- Did your cooperating teacher ever interrupt your teaching to correct you or tell you how to do something better? How did you feel about that?
- Now that you are teaching every day (or finished) what kinds of doubts do you have about teaching? What are the rewards? What aspects of it make you want to do better, to learn more?
- What would a visitor to your classroom see when they watch you teach?
- What have you learned about children's behavior?
- What or who has influenced your teaching the most? Other influences?
- What images guide your thoughts and actions in the classroom?
- What subject do you love teaching the most? Why? What subject are you uncomfortable with or maybe even subconsciously avoid? Why?
- What do you value most in the classroom? Prioritize this list (fairness & equity & justice, firmness, control, constructivism, peace and good will, cooperation & sharing, knowledge of content, enjoyment of lesson (fun), test scores, curriculum planning, assessment, morality & ethics, understanding of the children & their needs)
- This is a Venn diagram comparing student teaching to previous jobs. Please fill it out and bring it to the next interview along with the priorities list.

Interview 3: Focus on life/job experiences & other outside influences on learning to teach and other data sources such as journals, lesson plans, & portfolios

Enter here individualized questions stemming from previous data:

PARENTING INFLUENCES

- Many people say that having had children of your own helps you to manage children in your own classroom. What would you say to them?
- In what ways did your experience as a parent influence you in the classroom?
- How does working with and teaching your children compare to teaching children in a classroom?
- Your child, _____ is in the _____ grade at _____. How was that for you? (question directed to the three participants who had a child in same school in which they student taught)
- How is 'being on the inside' teaching different from being a parent on the outside?

PREVIOUS JOBS

- What have you learned from each of your jobs that has relevance in the classroom?
- How do your previous jobs compare to teaching? Physical environment? Rewards or punishments? Job satisfaction? Thinking about the job while not at work?
- How was learning those jobs vs. learning to teach?
- Think back over all of your student teaching. Can you remember times when you drew upon life/job experiences to teach? Tell about them.
- Society devalues the work of teachers, especially those who work with young children. How do you feel about that?

OTHER POSSIBLE INFLUENCES

- How have your outside interests & hobbies influenced what happens in the classroom?
- What sustains you in learning to teach?
- What do you value most? Discuss priorities from list given at last interview (family, religion, good health, communication, working for the greater good, making money, vacations, socio-economic status, education).

STUDENT TEACHING

- What would a visitor to your classroom see when they watched you teach?
- What have you learned about children's behavior that you may not have learned from parenting?
- What or who has influenced your teaching the most? Why?
- What subject are you uncomfortable with or maybe even avoid? Why?
- What do you enjoy the most in the classroom?

PRESENT SCHOOLING

- Looking back over your preparation to become a teacher, what has been good and positive?
- What needs to be changed?
- How, in your opinion, should older students be prepared differently?

FOCUS ON JOURNALS & PORTFOLIOS
(Individualize questions about these products.)

APPENDIX G

INITIAL SKETCHES OF PARTICIPANTS

Ann (39) was active duty Air Force, along with her husband, Carl. She retired from active duty before her first child was born. Her children are now 11 and 13. Carl just retired from the Air Force and has taken a civil service job in a southwestern state. The family moved there immediately following Ann's recent graduation ceremony where she was presented with her undergraduate degree in Education and English.

David (45) comes from a successful and lucrative business career. A devoted family man, he desired a life with less travel in which he could be with his family more and he wants to be a person who 'makes a difference'. His 40th birthday was a catalyst to asking questions about his life and the direction it was taking. David's spiritual life is also very important to him. His choices reflect his steadfast values and principles. He has just completed his master's degree in education.

Diane (41) is a freelance production editor. Now completing her masters in English/journalism, Diane has done editing for several large publishing firms. For the last ten years she has been freelancing. She has traveled with her husband John, an editor and author, who has written two books and numerous articles about interesting places. Her children, now 10 and 8, have necessitated a more home-based life. Diane is a Girl Scout troop leader and serves on the town's Parks and Recreation Commission. She hopes to become a classroom teacher and curriculum specialist in literacy. The books that she has been editing are mostly education books. The books and their authors have been a major influence in her desire to teach. Diane has one more course to take to complete her master's degree.

Kathy (41) speaks slowly and reflectively. She is a part-time librarian at the elementary school where she has been working for seven years. She has also done substitute teaching and worked as an aide there. So she has been working at this school since her youngest was in first grade. She has observed that some teachers seem to habitually yell at the children all day and others do not. She wants to become a teacher who does not. Kathy expects to complete her master's degree in 2005.

Suzanne (38) graduated from an 'Ivy League' school with a double major in government and German. She spent her junior year at the University of Hamburg in Germany. Her last job, from 1992-2001, was marketing manager for a computer software firm. An avid skier, Suzanne met her husband at a ski racing event. She was on her college's ski team and he raced for a large eastern university. Suzanne has been a ski racing coach for the past eight years. Her interest in her own children's learning and development sparked her desire to teach. They are now 5 and 7 as Suzanne completes her master's degree in education.

APPENDIX H

PERSONAL VALUES

Value	Priority	Ann	David	Diane	Kathy	Suzanne	Average
Family	1	1	1	1	1	1	1
Religion	8*	5	1	**	5	5	4
Good Health	2	1	2		1	2	1.25
Communication with others	4	2	2	4	2	4	2.8
Working for the greater good	6	2	3	2	4	5	3.2
Education	5	3	2	5	2	3	3
Vacations & leisure time	7	3	4		3	4	3.5
Socio-economic status	8*	5	4		4	3	4
Peace & well-being	3	1	3	3	1	3	2.2
Other	-	-	-	-	-	-	-

*Tied for 8th priority. ** Unlike the others Diane chose just her top five priorities.

APPENDIX I

CLASSROOM VALUES

Value	Priority	Ann	David	Diane	Kathy	Suzanne	Avg.
Fairness & equity & justice	2*	1	1	#	2	2	1.5
Communication	2*	1	1		2	2	1.5
Classroom management	3**	2	2		3	1	2
Constructivism (self-discovery)	3**	2	1	4	2	1	2
Cooperation & sharing	4	1	4	2	2	2	2.2
Knowledge of subject matter	5	1	2	5	3	1	2.4
Enjoyment of lesson (fun)	3**	2	2	3	1	2	2
Test scores & assessment	8	3	4		5	5	4.25
Curriculum planning	6***	2	3		4	2	2.75
Pedagogy	7	3	4		4	3	3.5
Context (such as school culture & community)	6***	3	3		1	4	2.75
Understanding of children & their needs	1	1	1	1	1	2	1.2

*Tied for 2nd place priority. **Tied for 3rd place. ***Tied for 6th place.

Unlike the others, Diane chose just her top five priorities.

APPENDIX J

DEFINITIONS AND DISCUSSION OF TERMS

Nontraditional student: Typically defined as a student who is 25 years of age with multiple roles and responsibilities. In this study, age is over 30.

Mature age students: Same as nontraditional student. Preferred term of this researcher, who along with others, feels that age 30 is a more appropriate dividing line.

Pre-service teachers: A student teacher; a student in a teacher education program.

Student Teaching: The capstone experience in a teacher education program where the student has a field experience that allows interaction with children and direction of instruction in a real setting and under the supervision of the cooperating teacher; also called a practicum.

Cooperating teachers: The classroom teacher who supervises and evaluates the student teacher during the field placement.

College supervisor: The college/university representative who is responsible for supervising student teachers and acts as a liason with the college and the school of placement.

Teacher education: Program of courses required for initial teacher certification.

Elementary education: Usually considered to be from grade 1 through grade 5 or 6.

Rainbow of life roles: The rainbow is a graphic device for portraying life-span, life-space career development. It was developed by Donald E. Super (1980).

Practicum: A field-based experience such as student teaching in a school; often preceded by pre-practicums; usually characterized by increasing responsibility until the student teacher is responsible for the planning and teaching and evaluation of full days.

Pre-practicum: These field experiences often precede practicums, but entail less responsibility on the part of the students who mostly observe and assist.

Normal School: The early name for a professional school that trained teachers.

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